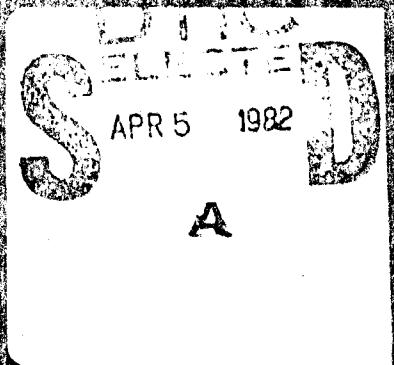


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16. Abstract This report presents the results and a description of the 1980 General Aviation Activity and Avionics Survey. The survey was conducted during 1981 by the FAA to obtain information on the activity and avionics of the United States registered general aviation aircraft fleet, the dominant component of civil aviation in the U.S. The survey was based on a statistically selected sample of about 14.0 percent of the general aviation fleet and obtained a response rate of 65 percent. Survey results are based upon responses but are expanded upward to represent the total population.				
Survey results revealed that during 1980 an estimated 41.0 million hours of flying time were logged by the 211,045 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 190.5 hours. The active aircraft represented about 83 percent of the registered general aviation fleet. The report contains breakdowns of these and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Also included are fuel consumption, lifetime airframe hours, avionics, and engine hours estimates.				
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METRIC CONVERSION FACTORS

Approximate Conversion from Metric Measures		Approximate Conversion to Metric Measures	
From	To	From	To
Length	Length	Length	Length
1 meter	3.281 feet	1 meter	3.281 feet
1 centimeter	.3937 inches	1 centimeter	.3937 inches
1 millimeter	.03937 inches	1 millimeter	.03937 inches
Area	Area	Area	Area
1 square meter	10.76 square feet	1 square meter	10.76 square feet
1 square centimeter	.1076 square inches	1 square centimeter	.1076 square inches
1 square millimeter	.001076 square inches	1 square millimeter	.001076 square inches
Volume	Volume	Volume	Volume
1 liter	.2642 gallons	1 liter	.2642 gallons
1 milliliter	.0002642 gallons	1 milliliter	.0002642 gallons
Temperature	Temperature	Temperature	Temperature
1 degree Celsius	33.8 degrees Fahrenheit	1 degree Celsius	33.8 degrees Fahrenheit
1 degree Fahrenheit	-45.92 degrees Celsius	1 degree Fahrenheit	-45.92 degrees Celsius

PREFACE

This report presents the results of the 1980 General Aviation Activity and Avionics Survey. The survey is the continuation of an FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Information and Statistics Division, sponsored and coordinated the activities associated with the survey, ran the system during survey production, and analyzed the survey results. Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, developed the sample design and computer system for sample selection, data editing and estimation of results, and prepared previous survey reports. TSC also conducted the telephone follow-up survey and transferred the survey responses to machine readable forms for the 1980 survey, tasks that were performed by the Mike Monroney Aeronautical Center in the 1977, 1978 and 1979 surveys. The Transportation Computer Center was responsible for printing names, addresses, and aircraft information on the survey questionnaires.

The authors would like to acknowledge contributions to this report by : Nicholas Soldo, AMS-220, who guided the project and reviewed the report text; Patricia Carter, AMS-220, who coordinated activities for the sample selection and the survey mailout; Marilyn Marotta of Systems Development Corporation who updated the computer programs for the 1980 survey; and Jay David, also of SDC, who performed the production runs to produce the estimates in this report.

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EXECUTIVE SUMMARY

This report presents the results of the fourth General Aviation Activity and Avionics Survey, conducted in 1981 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1980 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 14.0 percent of the registered general aviation fleet to participate in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, with a telephone follow-up survey of a sample of non-respondents, yielding in total a response rate of 65 percent.

Some important survey findings appear below:

- o An estimated 41.0 million hours of flying time were logged by the 211,045 active general aviation aircraft in the U.S. fleet during 1980. These aircraft had a mean annual flight time per aircraft of 190.5 hours and represented about 83 percent of the registered general aviation fleet.
- o Turboprop aircraft flew over 533 hours per aircraft during 1980, more than any other aircraft type. Moreover, twin engine turboprops with thirteen or more seats flew more than 1000 hours per aircraft. In contrast, single engine piston powered aircraft averaged about 168 hours per aircraft during the year.
- o The most common primary use of a general aviation aircraft was personal for an estimated 46 percent of the active fleet, followed by business for 23 percent of the fleet, and executive and aerial application for 7 percent of the fleet each.
- o The most populous region in terms of based aircraft was the Great Lakes Region, housing an estimated 18 percent of all registered general aviation aircraft, followed closely by the Western Region with 17 percent. The most populous state was California, housing 14 percent of the registered aircraft.
- o Over 83 percent of the general aviation aircraft had two-way VHF communication equipment, 61 percent were equipped with 4096-code transponders, over 55 percent had at least one component of an instrument landing system, and almost 80 percent had some form of navigation equipment.

- o An estimated 22 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 72 percent of the GA fleet could not fly above 12,500 feet due to avionics limitations alone.
- o An estimated 42 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1980.
- o The general aviation aircraft fleet consumed an estimated 1,286 million gallons of fuel during 1980, 520 million gallons of aviation gasoline and 766 million gallons of jet fuel.

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1. INTRODUCTION

1.1 GENERAL

1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1980 general aviation composed almost 99 percent of the U.S. civil air fleet¹, accounted for 84 percent of civil operations at FAA towered airports², and logged over 83 percent of the total hours flown by the U.S. civil air fleet³. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S., served two purposes: (1) Part 1 was the mandatory aircraft registration renewal form; (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA

¹ Census of U.S. Civil Aircraft, Calendar Year 1980, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1980), p. 4.

² "FAA Air Traffic Activity, Calendar Year 1980 Report," Federal Aviation Administration, (Washington, DC, 1980).

Note: General aviation as used in this report combines both general aviation and air taxi from the source above.

³ Air Carrier: Census of U.S. Civil Aircraft, Calendar Year 1980, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), p. 17. General Aviation: Table 2.4.

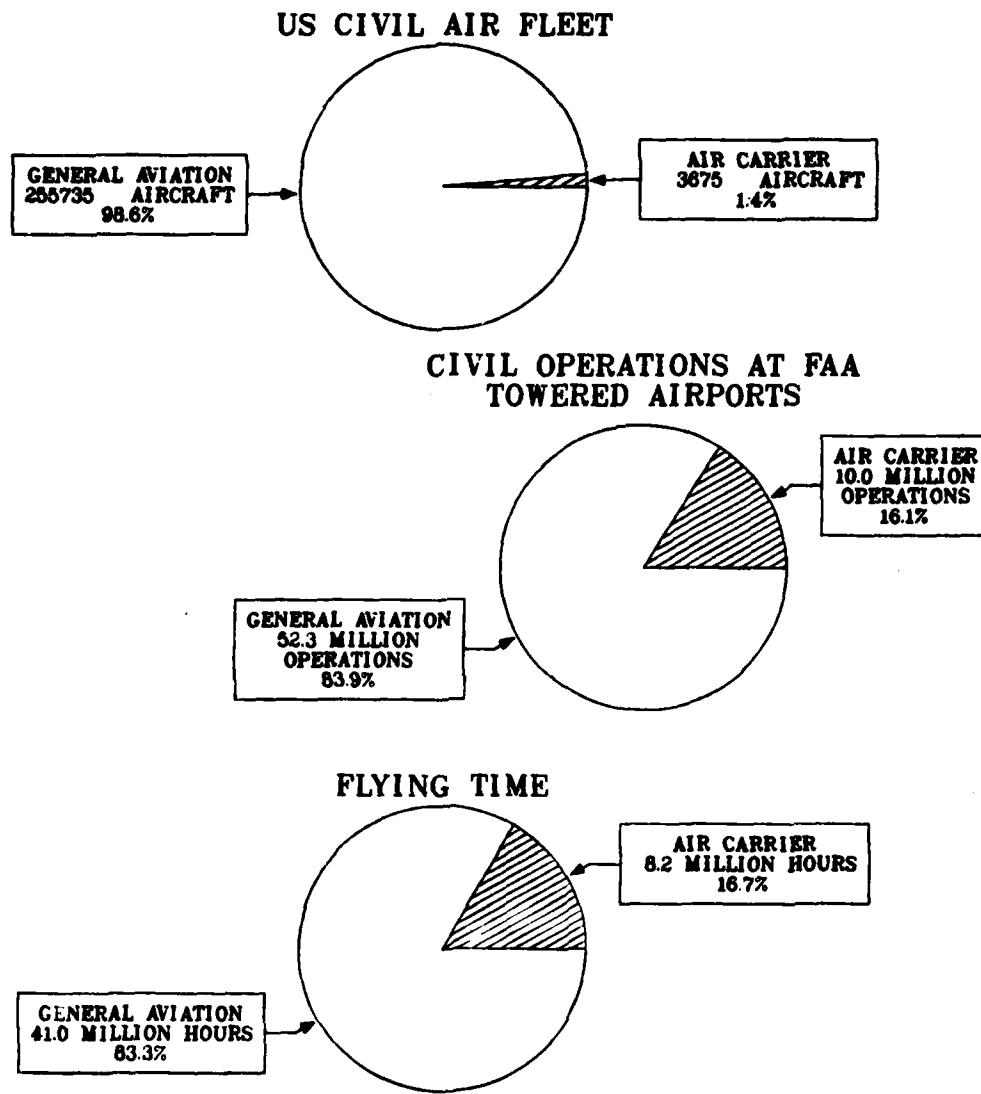


FIGURE 1.1. A CONTRAST OF GENERAL AVIATION AND AIR CARRIER ACTIVITY IN 1980

replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.3.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1980 statistics in this report were derived from the fourth survey, which took place in 1981. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government. Specifically, the public reporting burden was reduced by an estimated 13,000 hours annually, and the cost savings to the public and Government were estimated to be one million dollars annually.

1.2 SURVEY COVERAGE

1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations Parts 121 and 127. These two parts cover the operations of fixed wing aircraft and rotorcraft, respectively, that 1) have been issued a certificate of public convenience and necessity by the Civil Aeronautics Board authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations, and 2) are used by large aircraft commercial operators. General aviation thus includes aircraft operated under:

- Part 91: General operating and flight rules.
- Part 123: Certification and operations: air travel clubs using large airplanes.
- Part 133: Rotorcraft external load operations.
- Part 135: Air taxi operators and commercial operators of small aircraft.
- Part 137: Agricultural aircraft operations.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation

aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

1.2.2 Geographic

The sample survey covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1980. Over 99 percent of these aircraft are registered to owners living in the 50 states and Washington, DC, with about 0.2 percent (587 aircraft) registered in Puerto Rico and other U.S. Territories, and 0.2 percent (446 aircraft) registered to owners living in foreign countries.

1.2.3 Content

Appendix A.3 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide information on the sampled aircraft's characteristics and uses for various periods:

- 1) Hours by use, IFR hours, and fuel consumption for entire calendar year 1980,
- 2) Airframe hour reading and location of aircraft base as of December 31, 1980, and
- 3) Avionics equipment currently on board.

1.3 SURVEY METHOD

The main method of collecting data for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in two mailings. The first mailing in March, 1981, covered all 35,834 aircraft in the sample and had a response rate of 55 percent as shown in Table 1-1 below. This was about 84 percent of the total responses to the survey. The second mailing conducted in April, 1981, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 21 percent which accounted for 15 percent of the total responses to the survey. The combined response rate for the two mailings was 64 percent of the sample.

¹Source: FAA Aircraft Registration Master File as of December 31, 1980.

A telephone follow-up survey was conducted during August using the same questions appearing in the mail survey. A sample of the mail non-respondents was selected for the telephone survey weighing most heavily those states and make-model groups in the sampling strata that had the lowest mail response rates. Of a total telephone sample of 5,558 aircraft, only 265, or 5 percent, responses could be obtained due to difficulty in obtaining telephone numbers, finding owners at home, and obtaining cooperation of owners over the telephone. The 265 telephone responses contributed one percent of the responses and increased the overall response rate of the survey to 65 percent.

TABLE 1-1. SUMMARY OF RESPONSE INFORMATION BY SURVEY PHASE

SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE [(R/TOTAL R) X 100%]
FIRST MAILING	35,834	19,639	55%	84%
SECOND MAILING	16,195	3,465	21%	15%
COMBINED MAILINGS	35,834	23,104	64%	99%
TELEPHONE SURVEY	5,558	265	5%	1%
TOTAL	35,834	23,369	65%	100%

1.4 SUMMARY OF SURVEY RESULTS¹

1.4.1 National Scene

Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1980 an estimated 41.0 million hours of flying time were logged by the 211,045 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 190.5 hours. These active aircraft comprised 83 percent of the registered general aviation fleet. The statistics for 1980 showed a 5.4 percent decrease in flying hours, a 0.3 percent increase in the number of active aircraft in the general aviation fleet, and a 6.4 percent decrease in mean hours per aircraft over the comparable figures for 1979. Longer-term trends for these

¹ See Appendix B.1 for a discussion of effects of changes in the sample frame on the survey results.

variables are found in Figures 1.2, 1.3, and 1.4. Activity estimates for 1980 indicate an overall slowing in the growth of general aviation activity. The decrease seen in mean hours flown per aircraft can most likely be attributed to the decline in the economy and rising fuel and aircraft operational costs. Other general aviation activity measures showed trends similar to those seen in the General Aviation Activity and Avionics Survey. For example, general aviation operations at FAA towered airports decreased by 6.9% from 1979 to 1980.

1.4.2 Results by Aircraft Type

Although both the total flight time and the active aircraft count for the general aviation fleet grew at about the same annual rate (5.06 percent and 4.39 percent, respectively) from 1976 through 1980, significant deviations from these mean fleet rates occurred among the individual aircraft types. The following two tables illustrate this point. Tables 1-2 and 1-3 contain the four-year trends in growth for total hours flown and active aircraft, respectively. The last column in both tables is the compound annual growth rate for the aircraft type from 1976 to 1980. In Table 1-2 the fastest growth of any type in terms of total hours flown occurred to the turboprop other category with an annual growth rate of 36.74 percent. They were followed by the turbojet other category at 32.15 percent, and twin engine turboprops with 13 or more seats at 19.99 percent. In contrast, single engine piston airplanes with 1-3 seats and piston-powered rotorcraft experienced very little growth during the period. In general, it was the activity of the more sophisticated aircraft in the general aviation fleet that grew faster than the other components of the fleet. Similar results are shown in Table 1-3 for the active aircraft counts.

There was a great deal of variation in activity among the general aviation aircraft types in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation, as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

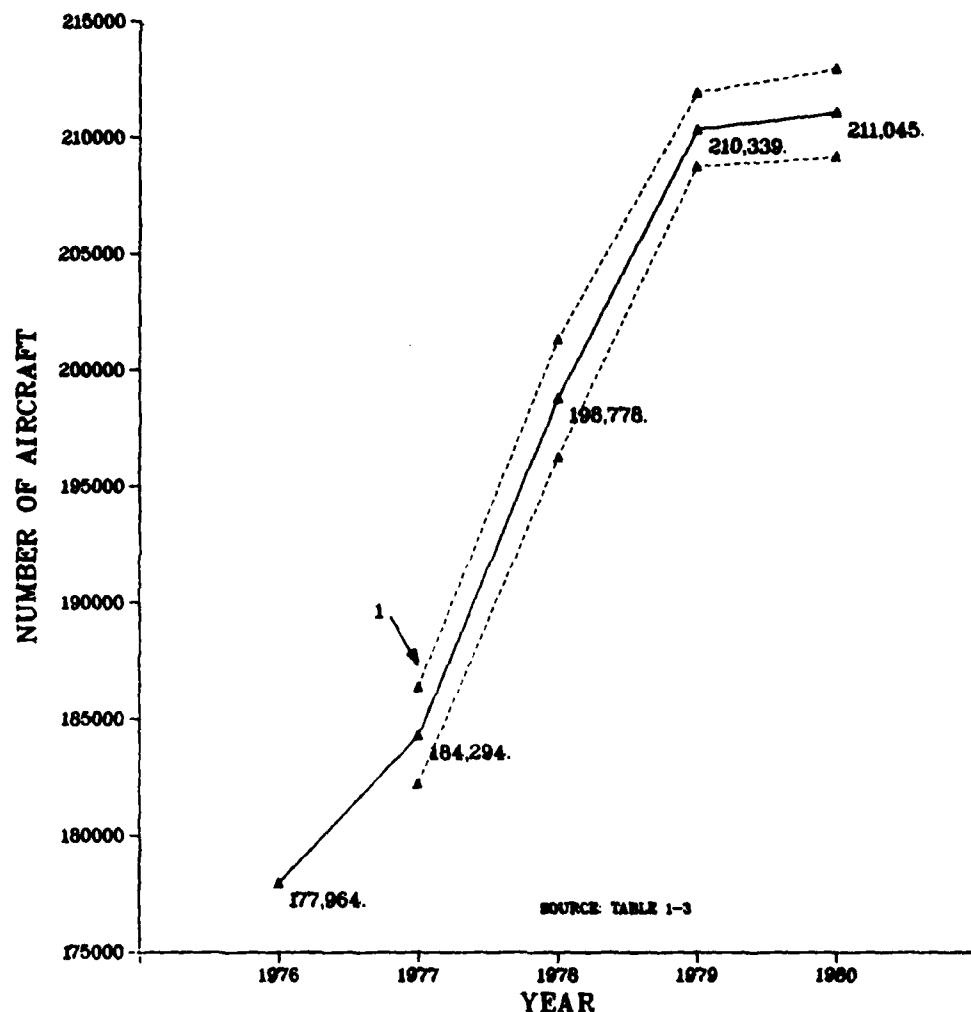


FIGURE 1.2. GENERAL AVIATION ACTIVE FLEET SIZE 1976 - 1980

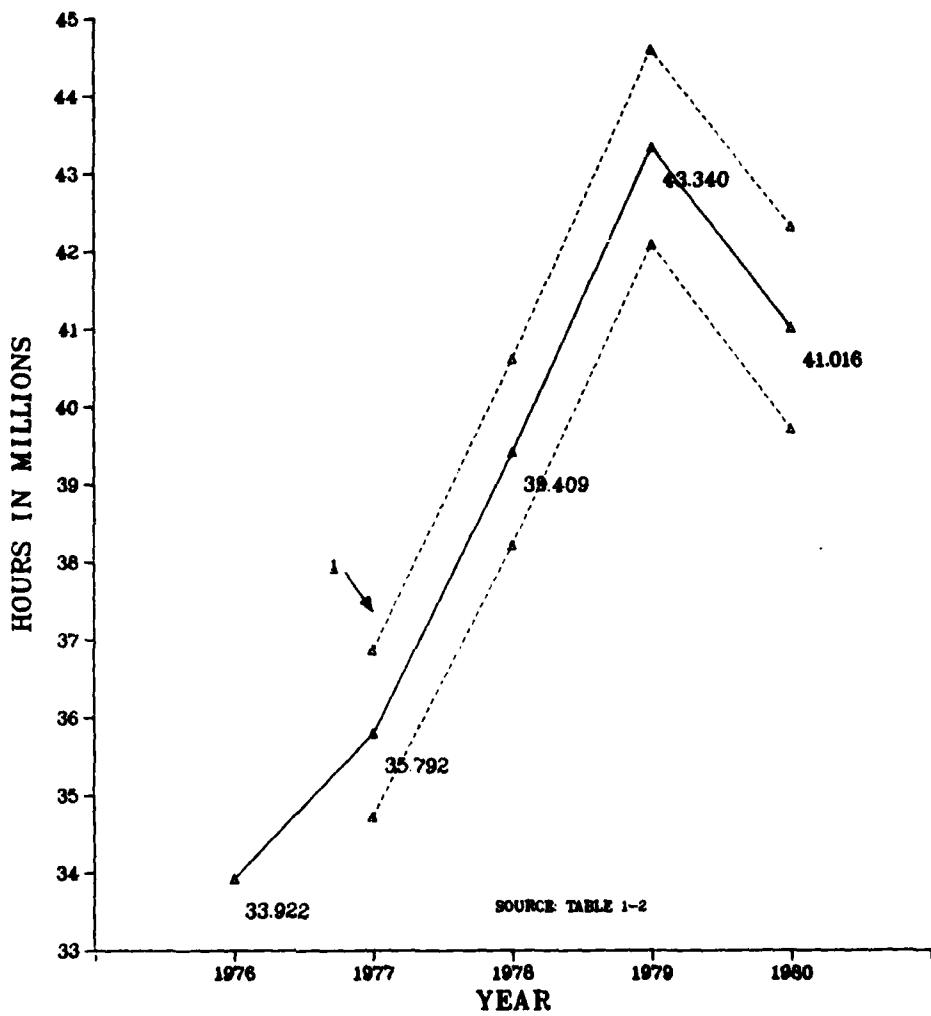
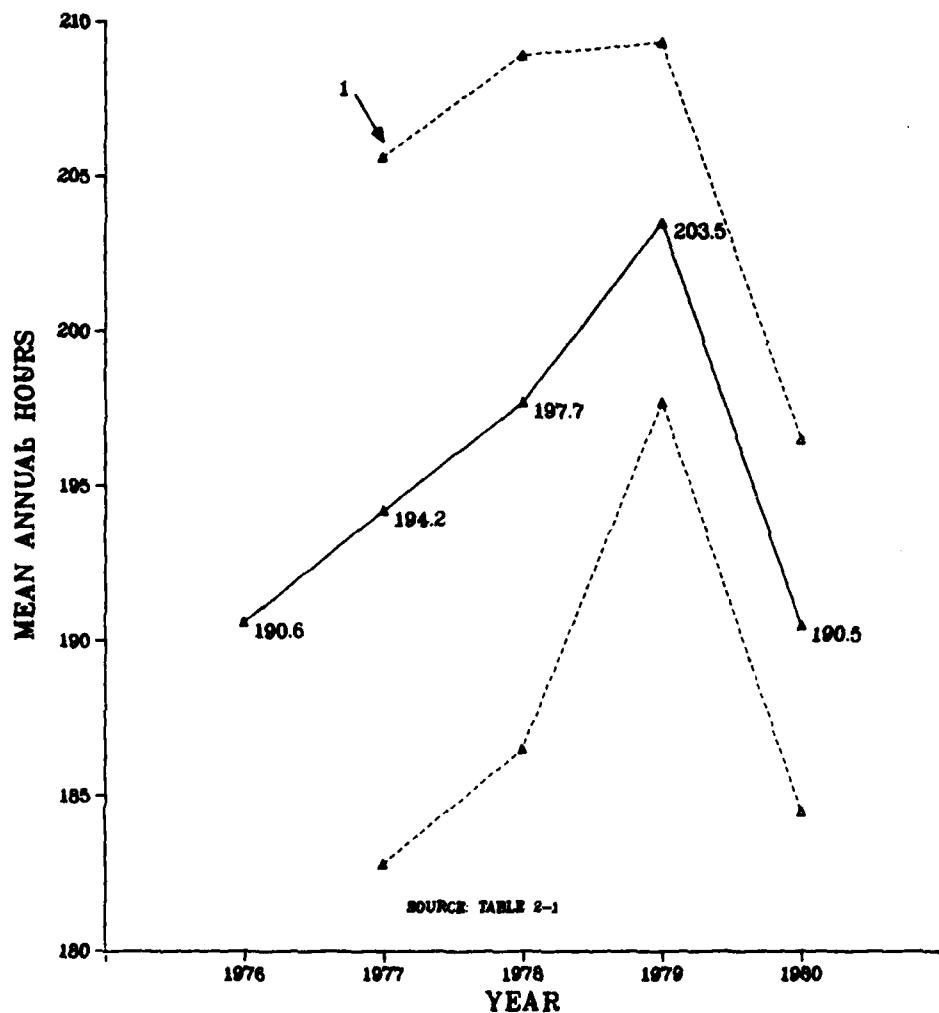


FIGURE 1.3. GENERAL AVIATION TOTAL FLYING TIME 1976 - 1980



1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1977 - 1980 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT 1976 - 1980

TABLE 1-2 GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE, 1976 - 1980
(Thousands of Hours)

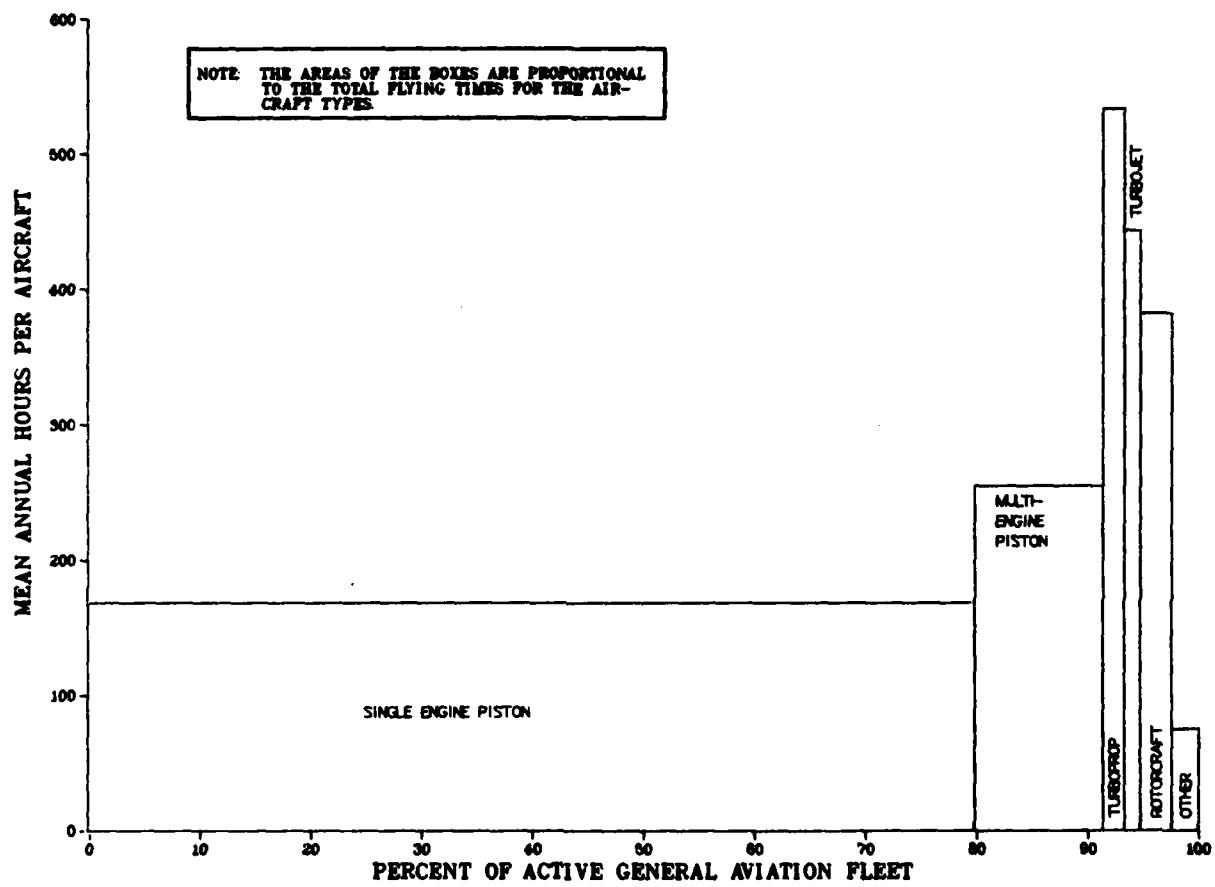
AIRCRAFT TYPE	1976 ¹	1977 (Standard Error)	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING						
1-engine piston 1-3 seats	9,640	8,973 (629)	10,111 (570)	11,180 (384)	10,044 (399)	1.54
1-engine piston 4+ seats	14,688	15,944 (824)	17,746 (992)	19,109 (420)	18,295 (428)	5.82
2-engine piston 1-6 seats	3,220	3,630 (202)	3,644 (241)	4,006 (148)	3,730 (172)	4.04
2-engine piston 7+ seats	2,081	2,322 (102)	2,439 (189)	2,855 (137)	2,547 (143)	5.72
Other piston	84	96 (5)	104 (7)	152 (15)	130 (18)	13.57
2-engine turboprop 1-12 seats	785	892 (37)	960 (49)	1,254 (57)	1,489 (55)	17.65
2-engine turboprop 13+ seats	521	625 (60)	622 (63)	572 (45)	964 (55)	19.99
Other turboprop	20	32 (5)	24 (3)	45 (2)	56 (10)	36.74
2-engine turbojet	844	1,043 (49)	1,019 (44)	1,125 (39)	1,163 (52)	8.76
Other turbojet	67	122 (11)	176 (30)	134 (9)	169 (27)	32.15
ROTORCRAFT						
Piston	753	609 (90)	806 (79)	892 (97)	736 (75)	1.60
Turbine	950	1,259 (93)	1,421 (135)	1,664 (108)	1,603 (115)	14.71
OTHER	270	245 (16)	338 (20)	353 (29)	359 (21)	8.71
TOTAL AIRCRAFT	33,922	35,792 (1,073)	39,409 (1,199)	43,340 (627)	41,016 (650)	.06

¹PAA revised data as of December 1978.

TABLE 1-3 GROWTH OF ACTIVE GENERAL AVIATION FLEET BY AIRCRAFT TYPE, 1976 - 1980
(Number of Aircraft)

AIRCRAFT TYPE	1976 ¹	1977 (Standard Error)	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING						
1-engine piston 1-3 seats	56,547	57,340 (851)	59,185 (860)	62,362 (594)	60,505 (688)	1.75
1-engine piston 4+ seats	88,205	91,960 (529)	101,466 (857)	106,028 (450)	107,930 (538)	5.22
2-engine piston 1-6 seats	14,617	15,074 (141)	15,621 (259)	16,891 (157)	16,224 (246)	2.73
2-engine piston 7+ seats	6,494	6,226 (86)	7,328 (202)	7,958 (90)	8,141 (153)	6.12
Other piston	196	182 (11)	221 (10)	229 (11)	212 (17)	2.62
2-engine turboprop 1-12 seats	1,889	2,276 (15)	2,507 (68)	2,944 (13)	3,339 (41)	15.37
2-engine turboprop 13+ seats	507	549 (13)	566 (10)	538 (15)	627 (18)	5.74
Other turboprop	57	64 (4)	56 (3)	96 (3)	123 (10)	24.83
2-engine turbojet	1,692	1,959 (19)	2,115 (27)	2,309 (29)	2,551 (37)	10.85
Other turbojet	189	318 (10)	364 (34)	343 (6)	441 (13)	26.38
ROTORCRAFT						
Piston	2,701	2,658 (176)	2,822 (155)	3,123 (127)	2,794 (133)	1.18
Turbine	1,724	2,067 (27)	2,492 (30)	2,740 (50)	3,207 (49)	16.86
OTHER	3,146	3,616 (69)	4,028 (75)	4,770 (114)	4,945 (142)	12.11
TOTAL AIRCRAFT	177,964	184,294 (1,034)	198,778 (1,269)	210,339 (789)	211,045 (945)	4.39

¹FAA revised data as of December 1978.



SOURCE: TABLE 2-1

FIGURE 1.5. 1980 GENERAL AVIATION ACTIVITY MEASURES BY AIRCRAFT TYPE

The general aviation aircraft fleet consumed an estimated 1,286 million gallons of fuel during 1980, 520 million gallons of aviation gasoline and 766 million gallons of jet fuel. From Figure 1.6 it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. In fact, turbojets with more than 2 engines consume about 800 gallons of jet fuel an hour on the average. The high rates account for turbojets' burning 37 percent of all fuel consumed in 1980, as shown in Figure 1.7. Piston aircraft account for 40 percent of the fuel consumed in 1980 due to their high representation in the general aviation fleet. Table 2-18 shows more detailed fuel consumption estimates and their standard errors.

1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.8. Distance along the vertical axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to the total flying time for each primary use. Aircraft used as commuter air carriers, air taxis, and for instructional purposes showed high individual usage with mean hours per aircraft of 1,018.2, 464.3, and 386.8, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 46 and 23 percent of the active fleet. While total hours flown for the general aviation fleet decreased by 5.4% from 1979 to 1980, flying time for executive aircraft increased by 6.6%. This was the only use category for which flying time increased from 1979 to 1980. Due either to their high representation in the fleet or to their high individual usage, personal, business, executive, air taxi, commuter and instructional use aircraft together accounted for 80 percent of the total hours flown by the general aviation fleet.

1.4.4 Results by FAA Region

Mean aircraft usage did not differ significantly from region to region with the exception of the Pacific and European (Foreign) Regions, according to Figure 1.9. In the figure, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes Region accounted for more active aircraft and the Western Region accounted for more total flight time than any of the other regions, although the Southern and Southwestern Regions are close behind. The smallest region in continental United States was New England, with only four percent of the active aircraft and about three percent of the fleet's total flight time.

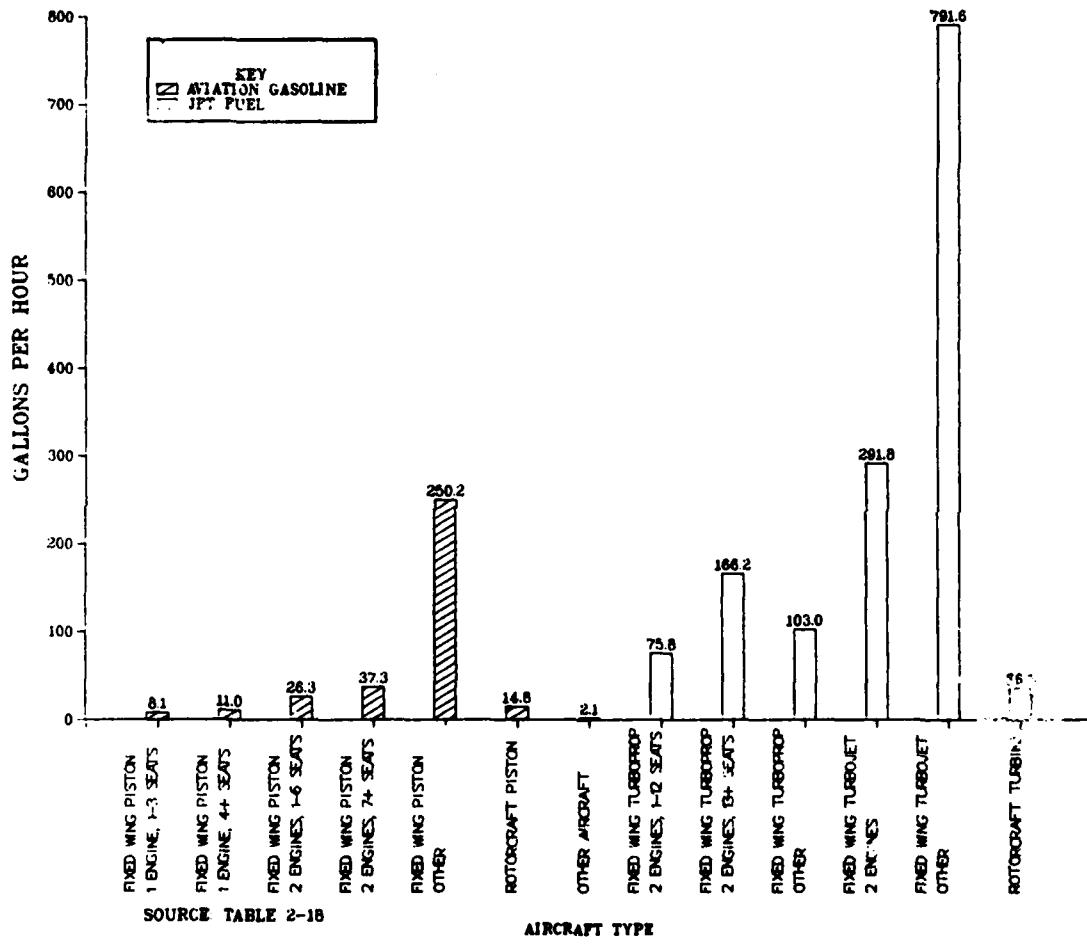


FIGURE 1.6. 1980 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE

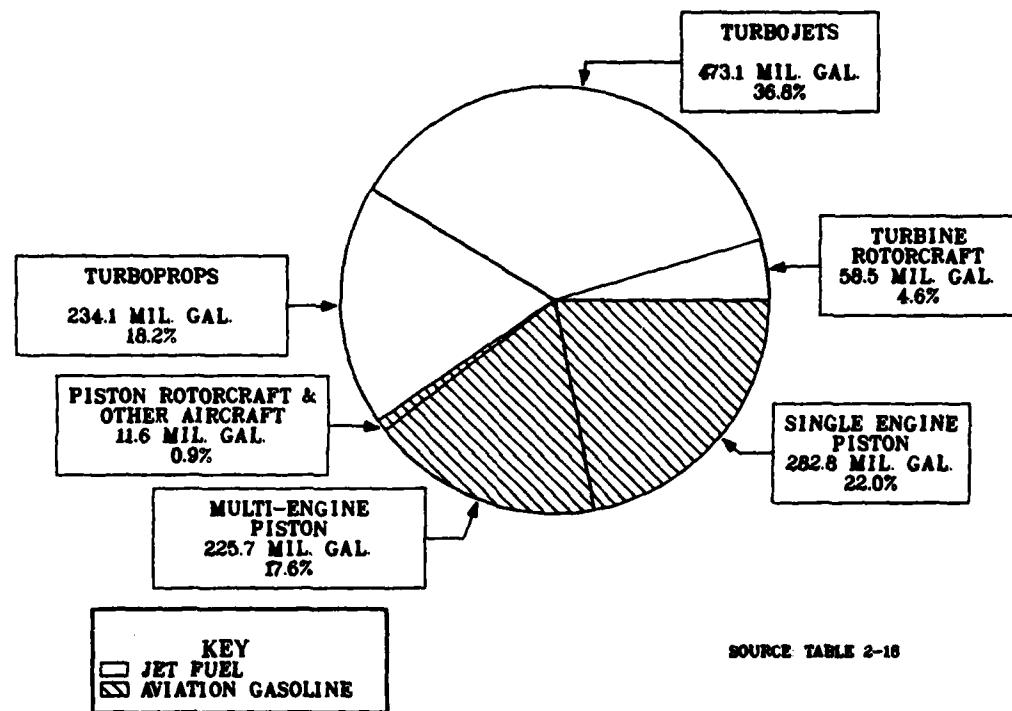
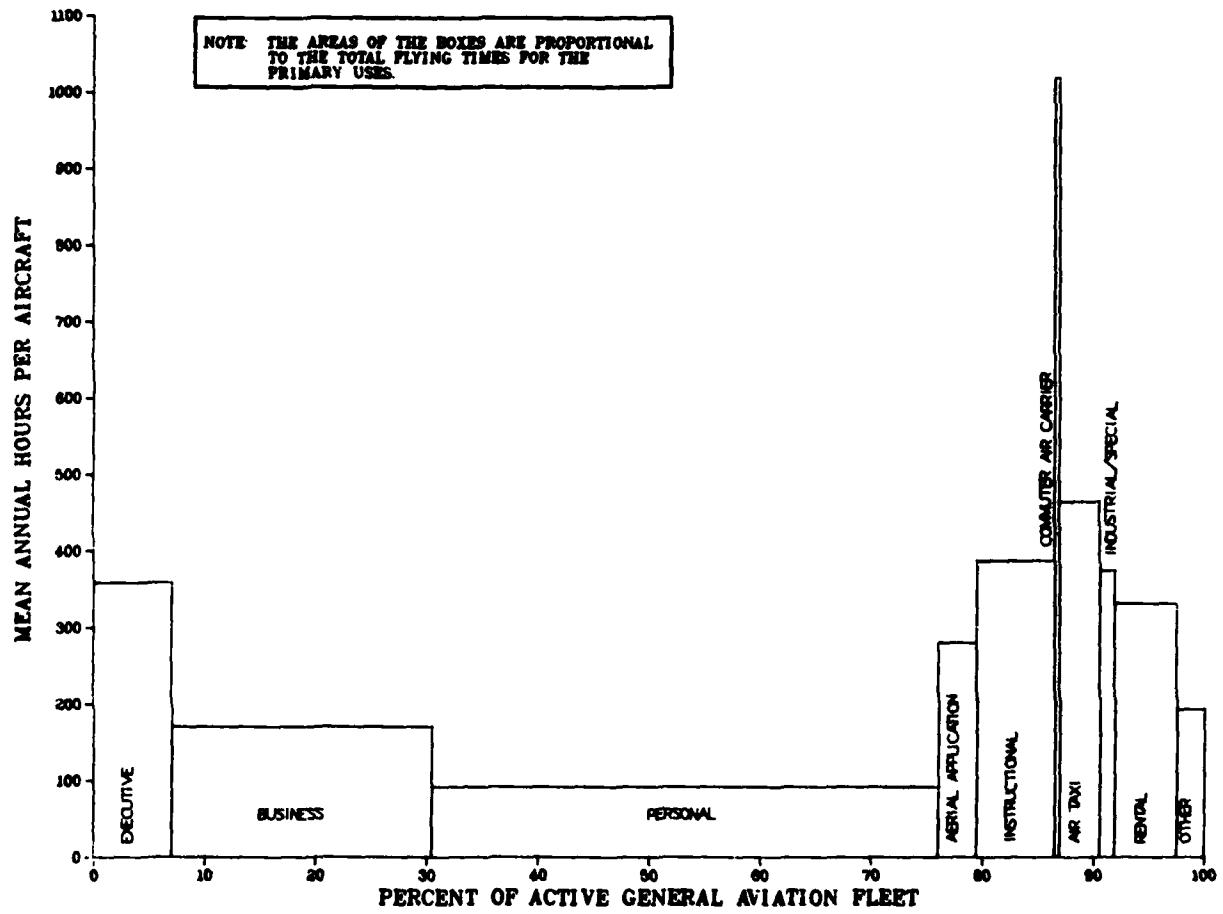
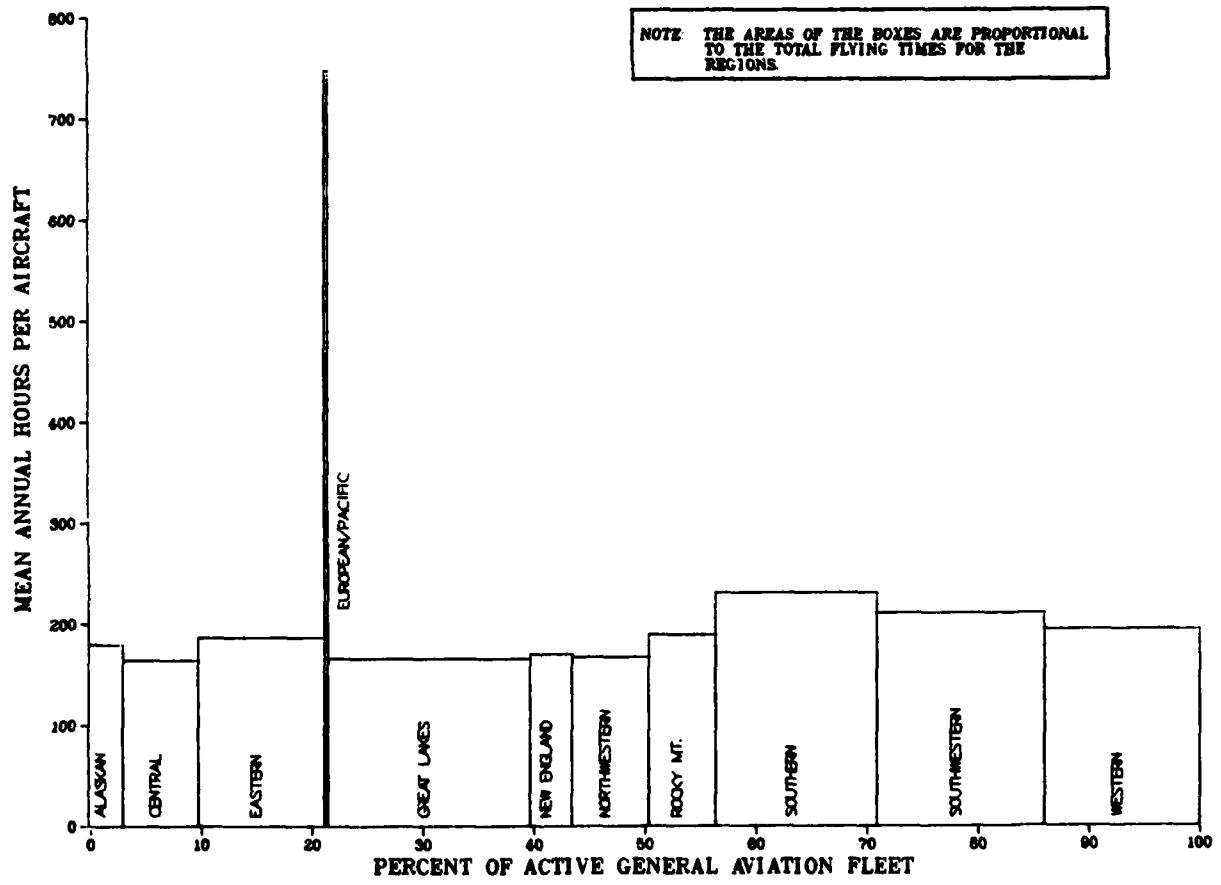


FIGURE 1.7. 1980 ESTIMATED FUEL CONSUMPTION
BY AIRCRAFT TYPE



SOURCE: TABLES 2-6, 2-9

FIGURE 1.8. 1980 GENERAL AVIATION ACTIVITY MEASURES BY PRIMARY USE



SOURCE: TABLE 2-3

FIGURE 1.9. 1980 GENERAL AVIATION ACTIVITY MEASURES BY FAA REGION

Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of aircraft base.

1.4.5 Results by Avionics Capability

1.4.5.1 Individual Avionics Components

The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.10. Over 83 percent of the aircraft have two-way VHF communications, 61 percent are equipped with 4096-code transponders, 55 percent have at least one component of an instrument landing system, and almost 80 percent have some form of navigation equipment. It is evident from comparing the 1980 and 1978 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. Likewise with VOR receivers there was a shift from 100 channel to 200 channel equipment. The proportion of the general aviation fleet with transponders increased from 53.3 percent in 1978 to 61.1 percent in 1980, and the proportion with at least one part of an ILS increased from 51.0 percent to 55.2 percent. The proportion of aircraft having two or more communications systems and the proportion with two or more VOR receivers increased by more than four percent from 1978 to 1980. More detailed breakdowns of avionics by aircraft type, state, region, and primary use are provided in Tables 2-12 through 2-15.

Figure 1.11 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1980 and further, the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1980 and were equipped with transponders. A much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, and not all were equipped with transponders.

1.4.5.2 Avionics Capability Groups

Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

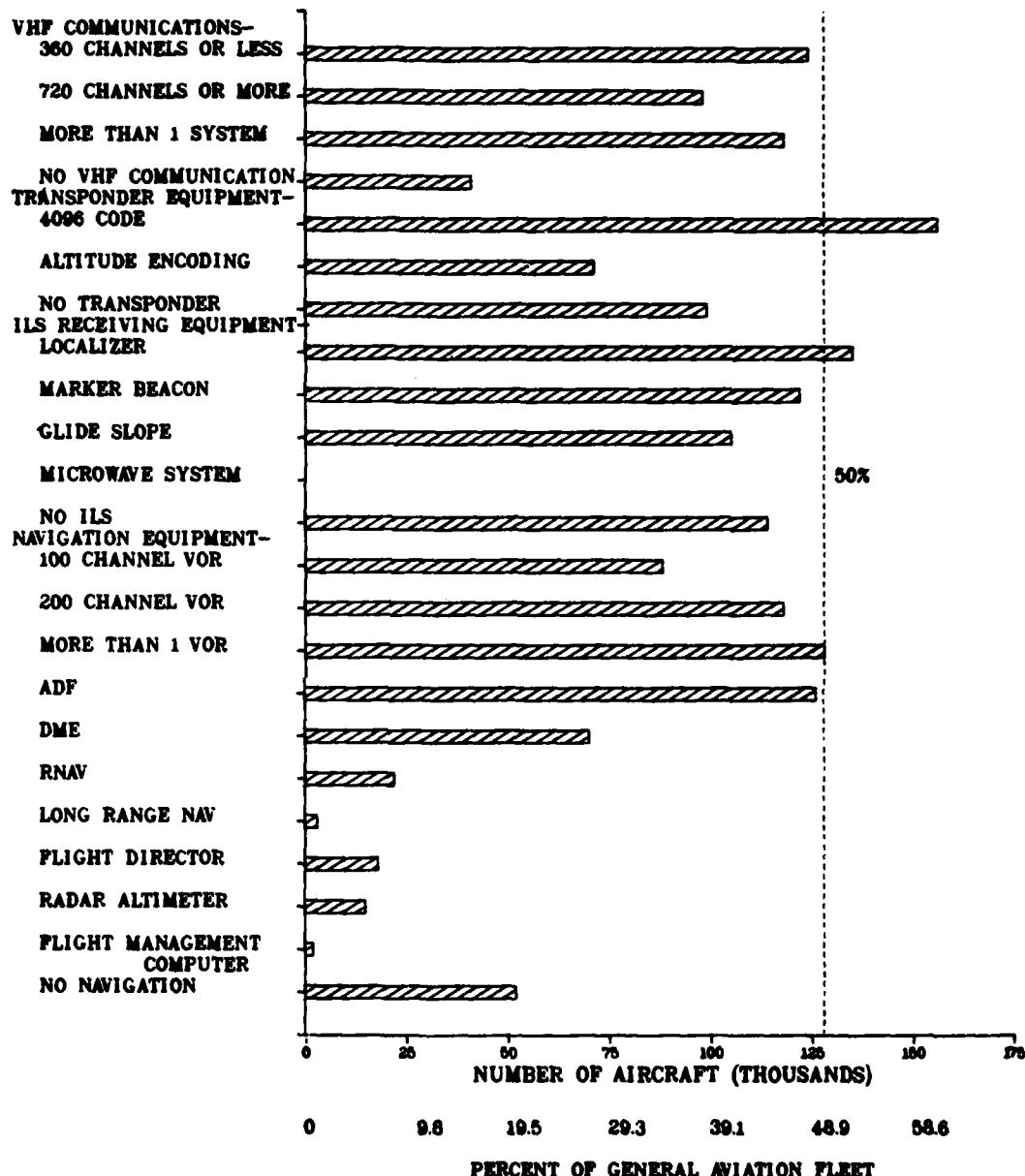


FIGURE 1.10. AVIONICS EQUIPMENT IN THE 1980 GENERAL AVIATION AIRCRAFT FLEET

SOURCE: TABLE 2-13

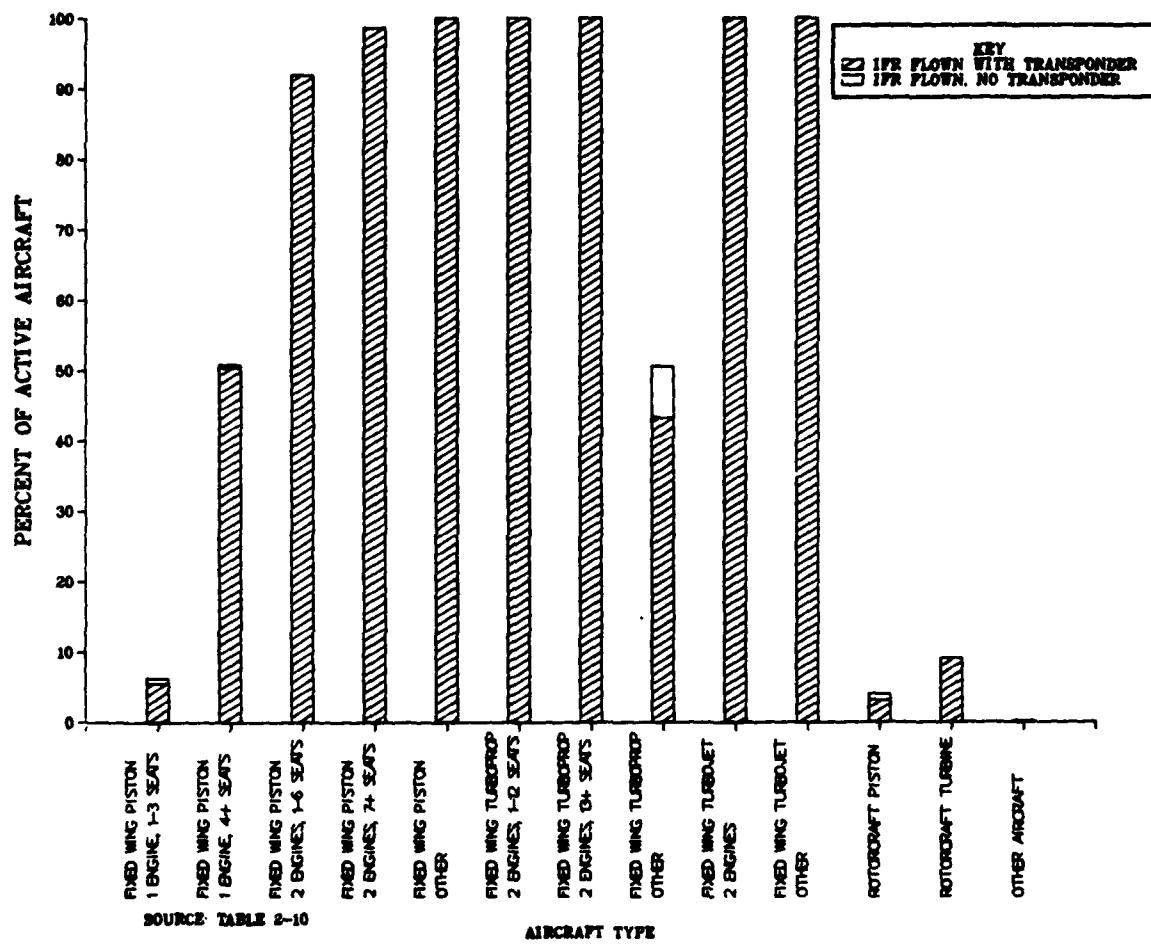


FIGURE 1.11. 1980 GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED

The methodology and assumptions for developing avionics capability groups are detailed in General Aviation Avionics Statistics.¹ This report also contains a glossary which explains numerous terms relating to avionics equipment and the National Airspace System.

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

¹General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp. 5-10.

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
<u>Group 1</u> No regulatory avionics	<ol style="list-style-type: none"> 1. Up to and including 12,500 feet mean sea level (MSL) Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL 2. VFR flight, day and night 3. Uncontrolled airports
<u>Group 2</u> Two-way communications	<ol style="list-style-type: none"> 1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters with 4096 code transponders...Group III TCA's All helicopters...Group I and II TCA's below 1,000 feet above ground level (AGL) <p>NOTE: Air taxis with navigation system and transponder: Group II TCA's</p> <p>Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace</p> <p>Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace</p>

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<u>Group 3</u> Two-way communications Two systems--air taxis VOR or Automatic Direction Finder (ADF) or RNAV	1. Up to an. including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL
	2. IFR flight 3. Non-TCA controlled airways Group III TCA's Helicopters with 4096 code transponders...Group II TCA's All helicopters...Group I and II TCA's below 1,000 feet AGL
<u>Group 4</u> Two-way communications Two systems--air taxis 4096 code transponder VOR or RNAV	1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL
	2. IFR flight 3. Non-TCA controlled airports Group II TCA's Helicopters...Group I TCA's below 1,000 feet AGL
<u>Group 5</u> 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Uncontrolled airports Group III TCA's

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<u>Group 6</u> Two-way communications 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters...Group I TCA's
<u>Group 7</u> Two-way communications Two systems--air taxis 4096 code transponder Altitude encoding equipment VOR	1. Non-positive controlled airspace VOR airways 2. IFR flight 3. Group I TCA's
<u>Group 8</u> Two-way communications Two systems--air taxis 4096 code transponder Altitude encoding equipment VOR or RNAV DME	1. Positive controlled airspace Jet routes RNAV...RNAV routes 2. IFR flight 3. Group I TCA's

TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
<u>Group 1</u> Localizer	Partial use of airport ILS
<u>Group 2</u> Localizer Marker Beacon	Partial use of airport ILS
<u>Group 3</u> Localizer Marker Beacon Glide Slope	Full use of airport ILS
<u>Group 4</u> ILS Radar Altimeter	Landing approach in Category III ¹ weather conditions at airports with Category III equipment
<u>Group 5</u> Long Range RNAV	Area navigation over long distances and large bodies of water
<u>Group 6</u> Radar Altimeter	Determination of altitude above level of terrain
<u>Group 7</u> Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at air- ports with mountains and large buildings nearby
<u>Group 8</u> ILS MLS	Backup landing systems
<u>Group 9</u> Long Range RNAV MLS	Sophisticated navigational and landing capabilities

¹ See Appendix D, "Weather Category Definitions," General Aviation Avionics Statistics (1979 Data), (Washington, DC, 1981).

Table 2-19 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-19 reveals the following observations on the GA fleet.

- a. About 22 percent of GA aircraft have the avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 72 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.
- b. Over 77 percent of GA aircraft are equipped to fly IFR.
- c. More than 16 percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 24 percent can land at either uncontrolled airports or Group II TCA's. Approximately 32 percent can land at any type of airport except a Group I TCA. About 28 percent can land at Group I TCA's. This proportion has increased constantly over the past 5 years.
- d. In general, Table 2-19 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sophisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e., NO GROUP) 77.4 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 89.6 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.

Tables 2-20 through 2-29 show a distribution of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1980, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

TABLE 1-6. COMPUTED AIRCRAFT TYPE

TYPE	DESCRIPTION
1.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

- a. As in prior years, as the hierarchical CG's increased in sophistication, the predominant uses also grew in sophistication from personal, to business and personal, to executive, business and personal (Table 2-20).
- b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal and business, to personal, business and executive, to personal and executive. For example executive aircraft alone compose over 48 percent of the aircraft reporting both a microwave landing system and a long range RNAV and about 44 percent of the aircraft reporting a complete ILS and radar altimeter, yet executive aircraft compose only 6.1 percent of the fleet (Table 2-25).
- c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in Avionics equipment (Tables 2-21 and 2-26).
- d. Aircraft in the more sophisticated groups contain newer aircraft on the average than less sophisticated CG's (Tables 2-23 and 2-28).
- e. Computed aircraft type increases in sophistication as the level of avionics increases. This relationship also holds for the four characteristics which are combined to form computed aircraft type: simple aircraft type, engine type, number of engines, and number of seats (Tables 2-24 and 2-29).

1.4.6 Other Results

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 300 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-16. Appendix D contains definitions of these groups. The report also includes a table on mean hours and number of active engines for almost 90 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.

2. TABLES OF RESULTS

TABLE 2-1 GENERAL AVIATION TOTAL HOURS FLOWN BY TYPE OF AIRCRAFT - CY 1980 (1 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE CP NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING PISTON									
1 ENG 1-3 SEATS	85024	61505	688	10044132	399204	4.0	165.6	6.4	3.9
1 ENG 4+ SEATS	115065	107930	538	1825127	428141	2.3	169.7	3.9	2.1
TOTAL 1 ENG	200069	168435	874	28339252	595379	2.1	168.2	3.4	2.0
2 ENG 1-6 SEATS	16529	16224	246	3730315	172764	4.6	220.0	9.8	4.3
2 ENG 7+ SEATS	5701	8141	153	2546304	142305	5.6	311.4	15.6	5.1
TOTAL 2 ENG	26230	24366	290	6277220	224208	3.6	254.8	8.4	3.3
OTHER PISTON	383	212	17	130250	17811	13.7	625.4	38.8	6.2
TOTAL PISTON	232702	193014	921	34746730	627101	1.8	178.2	3.1	1.8
TURBOPROP									
2 ENG 1-12 SEATS	3440	3339	41	1489249	55449	3.7	445.4	15.3	3.4
2 ENG 13+ SEATS	663	627	18	69457	54960	7.9	1038.2	65.6	6.4
TOTAL 2 ENG	4123	3966	45	2183406	78071	3.6	534.8	16.4	3.1
CTBTS TURBOPROP	159	123	10	56387	10325	18.3	487.4	73.1	15.0
TOTAL TURBOPROP	4282	4090	46	2239754	78751	3.5	533.4	16.1	3.0
TURBOJET									
2 ENG	2674	2551	37	1162554	52207	4.5	456.1	18.4	4.0
OTHERS	726	441	13	169037	26816	15.9	349.9	29.1	8.3
TOTAL TURBOJET	3400	2992	40	1331591	58691	4.4	443.6	16.6	3.7
TOTAL FIXED WING	240384	206097	923	30316076	634745	1.7	181.7	3.1	1.6
TURBOJET PISTON	5502	2794	133	735638	74866	10.2	262.9	20.9	8.0

TABLE 2-1 GENERAL AVIATION TOTAL HOURS FLOWN BY TYPE OF AIRCRAFT - CY 1980 (2 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE CP NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF HRS HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
TURBINE	3506	3207	89	1602652	115692	7.2	497.7	35.4	7.1
TOTAL ROTOCRAFT	9008	6001	142	2338490	137814	5.9	382.4	20.7	5.4
OTHER	4369	4945	142	358916	21282	5.9	75.0	3.9	5.2
TOTAL AIRCRAFT	255761	211045	945	41015542	699883	1.6	190.5	3.0	1.6

TABLE 2-2 GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT - CY 1980 (1 OF 3)

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	2083	295	426897	87565
ALASKA	6465	453	1170518	164271
ARIZONA	4681	461	1104326	204654
ARKANSAS	2612	232	436203	78886
CALIFORNIA	29855	1061	5865582	997653
CONNECTICUT	4768	454	886592	119311
DELAWARE	1615	261	297114	65535
DC	548	151	105204	51983
FLORIDA	59	50	31083	29634
GEORGIA	11347	682	3026108	4466855
HAWAII	4412	437	801185	117848
IDAHO	385	123	156986	66387
ILLINOIS	2094	302	385866	1056882
INDIANA	8990	616	1518296	173767
KANSAS	4248	426	672193	111452
KENTUCKY	4194	427	631816	91111
Louisiana	4190	430	685222	104895
MAINE	1810	284	395383	113111
MARYLAND	2755	350	494889	107863

TABLE 2-2 GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT - CY 1980 (2 OF 3)

MASSACHUSETTS	3044	361	481C51	96992
MICHIGAN	7243	559	1092817	140608
MINNESOTA	5287	472	833033	111605
MISSISSIPPI	2199	3C9	479061	100537
MISSOURI	4069	432	695788	116581
MONTANA	2269	320	323351	67614
NEBRASKA	1809	283	315216	90457
NEVADA	2145	303	305060	57654
NEW HAMPSHIRE	1100	217	181102	52523
NEW JERSEY	4137	424	764552	105122
NEW MEXICO	2041	283	405680	93507
NEW YORK	6278	514	1102579	137916
NORTH CAROLINA	3542	392	753791	120438
NORTH DAKOTA	1684	279	312545	115048
OHIO	8283	597	1396582	143725
OKLAHOMA	4H12	464	87C811	132349
OREGON	5967	493	1079399	151C46
PENNSYLVANIA	6167	496	1020537	115744
RHODE ISLAND	358	130	7C216	31684
SCOUTH CAROLINA	1907	256	429221	98352
SOUTH DAKOTA	1386	251	252156	82546
TENNESSEE	2824	354	562896	93177
TEXAS	18674	845	3842230	33013C
UTAH	1466	250	366819	89049
VERMONT	471	137	103825	41155
VIRGINIA	3C13	363	744370	172289

TABLE 2-2 GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT - CY 1980 (3 OF 3)

WASHINGTON	6483	525	938437			133800
WEST VIRGINIA	1060	219	178430			45106
WISCONSIN	4389	434	789843			115544
WYOMING	1143	217	264571			69106
PUERTO RICO	201	68	89176			30497
OTHER U.S. TERRITORIES	73	53	20217			16103
FOREIGN	544	119	191375			62435
TOTAL	211045	945	41015542			649883

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-3 GENERAL AVIATION TOTAL HOURS FLOWN BY REGION OF BASED AIRCRAFT - CY 1980

REGION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR HOURS
ALASKAN	6465	453	1170518	164271
CENTRAL	14264	778	2332006	190314
EASTERN	26021	563	4448955	274958
EUROPEAN	243	70	83368	31541
GREAT LAKES	38443	1190	6317133	306354
NEW ENGLAND	7931	575	1336920	139926
NORTHWESTERN	14576	168	2429448	223633
PACIFIC	411	125	167257	67337
ROCKY MOUNTAIN	12718	725	2395917	211752
SOUTHERN	30596	1075	7064876	459827
SOUTHWESTERN	31817	1074	6642877	390558
WESTERN	36883	1160	7244452	422672
TOTAL	211045	945	41015542	649883

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES

TABLE 2-4 GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE - CY 1980
(1 OF 3)

AIRCRAFT TYPE	TOTAL	EXECUTIVE	BUSINESS	PERSONAL	AERIAL APPL	INSTRUC- TICIAL	COMPUTER CARRIER	AIR TAXI	INDUS- TRIAL	RENTAL	OTHER
FIXED WING											
PISTON											
1 SEAT 1-3 SEATS											
157,101. HOURS	100,441.32	31,796.5	80,570.1	30,003.89	15,605.89	33,627.51	0.0	12,006	10,664.6	71,411.8	16,304.2
5 SEAT. BEECH	4.0	35.2	15.1	8.0	6.8	7.9	0.0	84.5	36.5	15.4	17.7
1 SEAT 4+ SEATS											
157,101. HOURS	182,551.27	76,073.1	53,165.82	52,527.17	14,634.9	19,807.95	66,199	128,073.6	35,208.0	276,299.0	34,647.4
5 SEAT. BEECH	2.3	22.7	4.0	3.1	34.6	12.2	55.8	12.7	22.0	8.9	25.0
TOTAL 1 SEAT											
157,101. HOURS	283,392.59	107,807.0	61,802.57	82,558.89	17,116.44	53,435.5	66,199	129,263.1	45,835.1	347,710.5	51,688.1
5 SEAT. BEECH	2.1	19.0	4.0	3.5	6.6	6.7	55.8	12.6	18.6	7.7	17.1
2 SEAT 1-6 SEATS											
157,101. HOURS	373,031.15	85,213.0	13,660.47	32,000.7	22,924	17,577.9	133,211	65,913.7	65,218	85,189	57,228
5 SEAT. BEECH	4.6	11.6	8.3	19.8	51.6	25.1	52.5	15.3	39.3	31.0	25.1
2 SEAT 7+ SEATS											
157,101. HOURS	2,469.04	76,184.7	43,896.6	10,380.3	17,166	5,089	31,112.1	74,545.3	21,025	59,027	65,062
5 SEAT. BEECH	5.6	10.8	12.4	34.1	25.7	91.4	32.7	14.3	52.0	43.8	26.9
TOTAL 2 SEAT											
157,101. HOURS	627,722.0	163,856.3	176,386.61	42,172.5	41,505	18,096.8	44,656.80	140,190.0	86,292	142,649	124,428
5 SEAT. BEECH	3.6	7.9	7.0	17.1	25.2	24.4	27.7	10.5	32.3	25.3	18.5
OTHER PILOTS											
157,101. HOURS	130,250	494	9,613	183	80,31	0.0	47,430	15,249	0	360.24	1310.5
5 SEAT. BEECH	13.7	151.7	43.8	49.6	16.1	0.0	18.0	28.8	0.0	33.6	29.5
TOTAL PILOTS											
157,101. HOURS	347,467.30	273,173.0	79,383.50	86,618.19	17,693.90	55,306.27	56,057.7	27,096.66	5,467.30	36,546.83	65,599.6
5 SEAT. BEECH	1.8	9.3	3.5	3.4	6.5	6.5	23.5	8.1	16.6	7.5	14.1
TURBOPROP											
2 SEAT 1-12 SEATS											
157,101. HOURS	146,929.0	106,555.9	145,220	2226	0.0	0.0	34,838	18,256.9	3,276	29,124	28,521
5 SEAT. BEECH	3.7	5.0	23.3	146.0	48.2	48.2	22.5	143.3	51.3	32.8	32.8

TABLE 2-4 GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE - CY 1980
(² OF ³)

AIRCRAFT TYPE	TOTAL	EXECUTIVE	BUSINESS	PERSONAL	AERIAL APPL	INSTRUC-TIONAL	COMMUTER CARRIER	AIR TAXI	INDUS-TRIAL	RENTAL	OTHER
2 ENG 13+ SEATS EST. 101. HOURS % SITL. BUSCA	454157	105058	41760	384	0.0	59.9	102	350846	132716	940	0
	14.0	44.2	56.4	0.0		16.0	24.4		150.6	0.0	39.5
TOTAL 2 ENG EST. 101. HOURS % SITL. BUSCA	2183406	1171465	166648	2596	0.0	59.9	102	385183	314194	6209	29124
	5.5	21.2	119.2	0.0		15.3	18.1		111.2	51.3	25.6
OTHER TURBOPCP EST. 101. HOURS % SITL. BUSCA	56347	1259	1204	0.0	32236	0.0	10248	5750	0.0	1075	5735
	18.3	90.6	31.3	0.0	24.4	0.0	62.2	33.0	0.0	45.5	38.1
TOTAL TURBOBCP EST. 101. HOURS % SITL. BUSCA	2239754	1172636	189110	2596	32236	59.9	102	395428	319695	4209	30837
	3.5	5.5	20.7	119.2	24.4	14.9	17.7		111.2	46.8	22.6
TURBOJET 2 ENG EST. 101. HOURS % SITL. BUSCA	1162554	551080	31514	0.0	0.0	50.2	26072	5292	76779	14697	587
	4.5	5.5	41.7	0.0	0.0	50.2	68.2	24.0		79.3	193.0
OTHER EST. 101. HOURS % SITL. BUSCA	149337	115775	9577	82	0.0	0.0	0.0	5580	0.0	21699	57587
	15.9	17.3	26.3	26.7	0.0	0.0	0.0	70.1	0.0	14.9	39.6
TOTAL TURBOJET EST. 101. HOURS % SITL. BUSCA	1551591	1071380	41252	82	0.0	25585	5292	82109	14697	22007	66660
	4.4	5.3	34.3	26.7	0.0	47.3	68.2	22.6		79.3	18.6
TOTAL TURBO EST. 101. HOURS % SITL. BUSCA	38218076	4940554	8147068	8664439	1801738	555835	959664	3102111	563251	3702329	778024
	1.7	5.7	3.4	3.4	6.4	6.5	16.6	7.4	16.3	7.4	12.6
MOTORCRAFT PISTON EST. 101. HOURS % SITL. BUSCA	725638	10145	60178	39887	204962	64247	0.0	19387	212397	1945	126342
	10.2	97.2	23.1	15.2	19.4	29.5	0.0	53.2	26.0	61.7	28.3
TURBINE EST. 101. HOURS % SITL. BUSCA	1602052	371980	199656	3536	34948	4711	1552	423277	284825	193685	75299
	7.2	20.2	39.0	40.3	34.6	135.3	132.6	19.6	24.0	49.6	31.0

TABLE 2-4 GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE - CY 1980
(3 OF 3)

AVIATION TYPE	TOTAL	EXECUTIVE	BUSINESS	PERSONAL	AERIAL APPL	INSTRU- TIONAL	COMMUTER CARRIER	AIR TAXI	INDUS- TRIAL	RENTAL	CYBER
TOTAL BOATCRAFT											
EST. 107. HOURS	2338490	380064	257975	34382	239732	68949	1552	439618	496095	195352	203669
5 STD. BACR	5.9	19.3	25.2	14.2	17.4	29.1	132.6	18.5	17.7	48.6	21.6
CTHIN											
EST. 101. HOURS	358976	7317	28877	175208	183	107311	160	52	0	24916	23555
5 STD. BACR	5.9	33.0	29.9	6.6	66.2	17.7	307.3	98.3	0.0	30.3	27.0
TOTAL AIRCRAFT											
EST. 107. HOURS	4101542	5331023	6433501	8893962	2043840	5748157	960901	3535866	1052818	3917085	1008073
5 STD. BACR	1.6	4.6	2.8	3.1	5.8	4.3	10.3	3.7	8.3	4.7	10.2

NOTE : ROW AND COLUMN SUBTOTALS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (1 OF 16)

MANUFACTURER/REGISTRY GROUP	GROUP SIZE	ESTIMATE CY TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
OTERS 01	995	222500	32697	14.6	48.7	6.3	13.0
OTERS 02	996	18863	13846	22.4	104.4	22.2	21.3
OTERS 03	432	49549	11728	23.7	148.8	31.3	21.0
OTERS 04	140	19627	5908	30.1	474.8	90.2	19.0
OTERS 05	88	22519	6689	29.7	382.7	107.8	28.2
OTERS 06	116	29562	3528	11.9	260.3	31.2	11.1
OTERS 07	206	201256	37576	16.7	1063.2	186.9	17.6
OTERS 08	56	16477	6130	37.2	405.5	137.2	33.6
OTERS 09	368	130923	19826	15.1	429.6	46.4	10.8
OTERS 10	172	11320	2978	26.3	163.3	41.1	25.2
OTERS 11	1726	32683	5067	15.5	75.0	10.0	13.3
OTERS 12	203	101149	13936	13.8	666.4	77.7	11.7
OTERS 13	1811	55966	10469	18.7	49.9	7.6	15.7
AFRS A593	42	2330	178	7.6	56.9	4.2	7.3
AFRS A592	41	331	127	38.5	19.1	3.1	16.1
ANICSPS316	124	73562	10504	14.3	608.0	83.5	13.7
ANICSPS341	69	10347	4613	30.8	351.9	42.2	12.0
ASUSTA205	70	21982	9841	44.6	321.0	141.9	46.2
ASUSTA205	292	18015	8876	24.6	105.6	18.9	17.9
ASUSPC10	25	181	55	30.2	19.7	3.4	17.1
ASUSCAT300	284	108164	12244	11.3	403.3	50.2	11.3

NOTE: SEE FOLLOWING PAGE FOR CODING.

NOTE: Other XX refers to all general aviation aircraft belonging to manufacturer/model groups of fewer than 20 aircraft in size for aircraft XX where XX stands for

- 01 Fixed wing piston, 1 engine, 1-3 seats.
- 02 Fixed wing piston, 1 engine, 4+ seats.
- 03 Fixed wing piston, 2 engine, 1-6 seats.
- 04 Fixed wing piston, 2 engine, 7+ seats.
- 05 Fixed wing piston, other.
- 06 Fixed wing turboprop, 2 engines, 1-12 seats.
- 07 Fixed wing turboprop, 2 engines, 13+ seats.
- 08 Fixed wing turboprop, other.
- 09 Fixed wing turbojet, 2 engines.
- 10 Fixed wing turbojet, other.
- 11 Rotorcraft, piston.
- 12 Rotorcraft, turbine.
- 13 Other aircraft.

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (2 OF 16)

MANUFACTURER/MODEL GROUP	GRCUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
AND FALC10	115	46758	8279	17.7	510.8	62.8	12.3
AND FALC20	178	66181	7667	8.9	484.2	43.1	8.9
ARCTICB37	46	0	0	0.0	0.0	0.0	0.0
ARCTICS1A	93	1471	173	11.7	42.6	3.4	8.0
ARCTICS1B1	27	365	106	29.0	39.9	9.0	22.5
ARCTICB15	216	6960	430	6.2	53.7	2.8	5.1
ARCTICB65	150	3374	310	9.2	44.7	3.3	7.5
ARCTICAC3	52	207	144	69.5	27.7	10.6	38.4
ARCTICB058	168	3219	963	30.1	46.5	5.1	10.9
AVIA FALCC1	24	2301	986	42.8	104.2	44.4	42.6
AYRES S2	940	276988	43605	15.7	394.4	47.0	11.9
BAC 111	28	14001	2987	21.3	500.1	106.7	21.3
BAG B206	37	4164	1137	27.3	112.5	30.7	27.3
BAG DH125	42	20873	2216	10.6	457.0	52.8	10.6
EAG JETST1	26	33061	8512	25.7	1339.8	328.9	24.5
FAIRKSFIREY	642	27676	4331	15.6	46.1	6.7	14.6
EPIC H 100	242	115508	9465	8.2	477.3	39.1	8.2
EPIC H 17	195	5598	669	12.0	54.6	5.2	9.5
EPIC H 19	1113	158831	56678	35.7	282.3	89.0	31.5
EPIC H 200	593	262144	25659	10.6	482.7	50.9	10.5
EPIC H 23	2863	450045	62409	13.9	173.4	23.1	13.4

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (3 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 33	1617	260855	50458	19.3	163.8	31.5	19.3
BEECH 35	7142	555029	75433	7.6	150.5	10.9	7.2
BEECH 36	1473	292268	27924	9.6	216.6	18.5	8.6
BEECH 45	324	32173	7659	23.8	140.0	25.2	18.0
BEECH 50	372	39735	48339	12.5	156.5	15.6	10.0
BEECH 55	2222	484327	71740	14.8	231.3	33.4	14.4
BEECH 56	68	11175	16222	14.5	175.7	23.5	13.4
BEECH 58	1164	457906	72180	15.8	409.9	63.4	15.5
BEECH 60	389	84012	10620	12.6	216.0	27.3	12.6
BEECH 65	166	27349	9687	35.4	169.8	58.7	34.5
BEECH 76	263	43133	10711	24.8	180.4	42.4	23.5
BEECH 77	149	40026	2281	5.7	271.8	15.3	5.6
BEECH 80	234	32290	11025	34.1	215.8	49.7	23.0
BEECH 90	873	375276	26221	7.0	431.5	23.8	6.9
BEECH 95	491	67688	10490	15.5	144.7	21.1	14.6
BEECH 99	90	141055	17216	12.2	1642.6	174.5	10.6
BELL 204	148	17169	1108	6.5	161.8	9.3	5.8
BELL 206	1733	913635	97916	10.7	528.0	56.5	10.7
BELL 212	141	87786	18466	21.0	622.6	131.0	21.0
BELL 47	1563	353153	51839	15.6	349.9	39.4	11.3
ELANCA 11	995	19555	6746	34.5	46.7	13.8	29.5

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SUR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (4 OF 16)

MANUFACTURER/MODEL GROUP G/CUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR OF ESTIM HOURS	PERCENT STANDARD ERROR HOURS	ESTIMATE OF PLAN HOURS	STANDARD ERROR OF PLAN HOURS	PERCENT STANDARD ERROR
ELANCA 1413	393	5231	437	8.4	46.8	2.7	5.9
ELANCA 1419	307	16564	3717	22.4	74.9	14.2	18.9
ELANCA 17	1101	142263	11439	8.0	136.9	10.7	7.8
ELANCA 17	6177	554264	126216	21.2	137.4	28.4	20.6
ELANCA 18	738	73166	16910	23.1	112.8	25.0	22.1
BIOJET BN 2	70	35281	7031	19.9	571.8	106.5	18.6
BORIN G707	60	12256	2948	22.2	474.1	85.5	19.0
BORIN G720	24	1267	384	30.3	208.6	37.4	17.9
BORIN G727	159	74451	25306	34.0	468.2	159.2	34.1
ECPING737	39	11934	0	0.0	306.0	0.0	0.0
ECPING747	0	6286	1656	26.3	786.4	207.0	26.3
ECPING75	2053	75450	18485	24.5	93.0	17.5	18.9
ECIKA5105	66	15578	3609	16.4	355.0	55.3	15.6
ERAIRODH 125	96	33517	2813	8.4	352.8	23.6	6.4
ERASOVIS 26	53	5131	587	11.4	112.4	11.8	10.5
ERUSTPFL 12	29	327	65	20.1	37.5	4.9	13.1
ERUSTPFL 17	22	379	119	31.3	42.6	6.8	15.9
BURK 131	29	1132	567	50.1	82.1	32.2	39.2
CARFONHODELC	195	6626	1558	24.1	63.1	15.2	24.1
CCOPTER 7BELL	41	7408	1421	19.3	257.0	34.9	13.6
CESSNA 120	912	45939	12104	26.3	73.7	17.8	24.1

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (5 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE TOTAL HOURS	STANDARD ERROR TOTAL HOURS	PERCENT STANDARD ERROR	ESTIMATE OF HRS HOURS	STANDARD ERROR ESTIMATE OF HRS HOURS	PERCENT STANDARD ERROR
CESNA 140	2523	162164	51040	31.5	85.0	26.2	30.9
CESNA 150	20131	4271715	306517	7.2	237.4	16.5	7.0
CESNA 170	2595	192266	26777	13.9	80.1	10.8	13.5
CESNA 172	26519	4359315	277296	6.3	169.5	11.8	6.2
CESNA 175	1437	78773	17558	22.3	64.4	13.7	21.2
CESNA 177	3055	449895	49325	9.9	153.0	14.7	9.6
CESNA 130	2822	364308	49378	13.6	144.6	18.9	13.1
CESNA 182	13620	1541069	131051	6.8	150.7	13.0	6.6
CESNA 185	1477	276137	46571	17.6	199.1	34.2	17.2
CESNA 194	1941	565844	99943	17.5	330.8	55.6	16.8
CESNA 190	88	2980	359	12.0	54.3	5.1	9.4
CESNA 195	517	25819	3881	15.0	75.8	10.9	14.4
CESNA 206	2950	666073	8076	11.8	247.0	28.3	11.4
CESNA 207	380	191335	36553	19.1	618.0	96.2	15.6
CESNA 210	6156	1122291	94810	8.4	158.7	15.9	8.0
CESNA 305	265	30695	10293	33.5	151.9	46.4	30.5
CESNA 310	3360	549706	59864	10.2	192.9	17.4	9.0
CESNA 320	364	63976	17232	26.9	209.1	51.6	24.7
CESNA 335	38	4021	950	23.6	129.3	26.7	20.7
CESNA 336	100	8199	796	9.7	103.2	9.0	8.7
CESNA 337	1362	242065	34636	14.3	180.9	25.5	14.1

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (6 OF 16)

MANUFACTURER/ MODEL GROUP	GBCUP SIZE	ESTIMATE OF TOTAL PCUBS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF HRS/ HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESNA 340	826	201884	23459	11.6	271.6	27.3	10.0
CESNA 401	261	89297	13072	14.6	343.8	50.0	14.5
CESNA 402	670	303484	65559	21.6	487.4	101.0	20.7
CESNA 404	162	65666	22910	32.9	746.0	151.9	20.4
CESNA 411	178	23430	5964	25.0	154.1	34.9	22.6
CESNA 414	687	148996	34474	23.1	238.3	52.3	22.0
CESNA 421	1217	340641	41935	12.3	279.9	34.5	12.3
CESNA 441	127	51851	8013	15.4	408.3	63.0	15.4
CESNA 4500	350	143874	15062	10.5	411.1	43.0	10.5
CESNA 450	93	208	124	59.3	9.3	2.6	28.3
CESNA 477	21	162	163	103.6	15.9	15.2	95.8
CESNA 494	37	414	36	24.4	31.7	6.2	10.4
CHILD 52	129	10079	1163	10.7	89.6	1.2	10.2
CCM 1015	107	1064	335	19.3	51.5	6.4	12.4
CCM 1016A	486	38159	2593	6.8	87.4	5.6	6.4
CDF 111SC46	43	3415	1067	31.3	186.8	44.5	23.0
CUB 111JF	21	74	36	48.3	18.7	5.4	20.8
CUB 111ROBIN	34	47	15	32.0	14.0	2.0	14.6
CUB 111STAVAIR	183	2516	271	10.8	61.4	4.9	8.0
CVAC 22	41	2810	865	30.6	475.5	112.5	23.7
CVAC 240	62	1664	593	35.1	68.7	26.1	29.5

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (7 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL FCURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PLAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CVAC 340	29	5459	2337	42.8	241.7	83.6	34.6
CVAC 440	27	4891	2995	68.0	326.0	0.0	0.0
CVAC BT13	98	1363	308	22.6	38.0	6.2	16.3
CVAC L13	21	378	295	78.1	90.0	0.0	0.0
CVAC STC590	44	23157	2183	3.4	591.5	51.0	9.6
CART G	26	236	59	25.1	29.9	4.7	15.8
CHAV DHC1	89	5157	1312	25.4	57.9	14.7	25.4
CHAV DHC2	351	86880	36575	42.1	395.8	142.7	36.1
CHAVXIDH82	105	3474	1100	31.7	54.1	15.0	27.7
DCUG A26	69	1452	831	57.3	46.8	25.5	54.4
DCUG DC10	0	0	0	0.0	0.0	0.0	0.0
DCUG DC3	463	46814	16742	35.8	161.4	51.1	31.7
DCUG DC4	71	10472	4197	40.1	297.8	89.6	30.1
DCUG DC6	113	46313	13718	29.6	77.0	171.8	22.1
DOUG DC7	48	7172	2747	38.3	208.9	76.0	36.4
DCUG DC8	61	3925	2177	55.5	143.3	63.1	44.0
DCUG DC9	25	9730	1998	20.5	507.9	68.1	13.4
EMB110V20	105	5381	1550	16.5	90.5	14.8	16.3
EMB110 MA1	28	1203	746	62.0	250.0	60.2	32.1
EMB110	31	43238	7556	17.5	1394.6	243.7	17.5
INSTRMP20	437	63585	6684	10.4	176.8	17.3	9.8

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (8 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FLEET 16B	25	456	107	23.4	37.6	5.2	13.9
FRCBLD24	319	2547	787	30.9	32.3	7.7	24.0
FRCBLDC119	26	2262	256	11.3	145.0	10.4	7.2
FRCBLDF27	32	9974	1109	11.9	391.5	35.9	9.2
FRCBLDB62	244	2713	896	33.0	34.1	4.2	12.2
GENFIAK6	37	1178	354	30.0	31.8	9.6	30.0
ELASPILLIBELI	163	5181	182	10.7	63.0	6.1	9.7
GFCF ASTIR	51	2441	803	23.2	72.3	16.3	22.6
GFTIKS2T1	183	12747	1265	10.1	100.0	3.5	9.5
GRUPANTBN	35	1376	643	46.7	66.4	21.4	32.2
GRUAVAA1	646	56129	11559	12.1	170.0	19.3	11.3
GRUAVAA5	1064	191227	27832	14.5	188.0	26.2	13.9
GRUAVG164	627	254855	61389	24.1	415.8	99.1	23.8
GRUAVG21	63	684	511	74.8	83.0	15.4	18.6
GULSTHAA1	661	57128	11518	20.2	100.9	18.6	18.5
GULSTHAA5	999	173665	30352	17.5	181.5	31.0	17.1
GULSTHIC1159	168	122208	29334	24.0	625.7	198.2	24.0
GULSTHIC152	153	50466	13174	14.6	591.3	86.1	14.6
GULSTHIC164	574	213165	33297	26.6	423.9	102.4	24.2
GULSTHIC4	31	10667	2163	20.0	159.1	28.8	18.1
GULSTHIC73	26	12703	1606	11.6	667.5	51.6	7.7

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (9 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
GOUSTANGA7	64	13812	2844	20.6	250.9	44.6	17.8
ERLIO H250	21	2616	561	19.9	157.6	27.9	17.7
ERLIO H295	108	13934	1730	12.4	171.0	18.3	10.7
ERLIO H391	27	802	240	29.9	49.9	12.4	24.9
ERLIO H395	24	3610	749	20.8	179.3	34.3	19.1
ERLIO H900	74	14900	6047	40.6	344.9	65.1	18.9
HILLERUH12	688	139235	38759	27.8	291.6	73.8	25.3
FUGGER269	709	152387	36700	23.2	336.4	67.9	20.2
HUGGETS369	478	192915	35914	18.6	490.7	76.1	15.5
HUKSLIDH10	46	1728	891	51.6	142.8	64.4	45.1
HUKSLIDH114	43	43776	7693	17.6	1747.6	192.5	5.9
HUKSLIDH125	37	16162	3363	18.5	589.7	83.1	14.3
HYMES B2	136	6198	1508	18.4	109.1	19.0	17.4
ISRAEL1121	117	46257	6955	15.0	413.0	53.2	14.3
ISRAEL1123	21	7046	1333	14.6	335.5	49.0	14.6
ISRAEL1124	35	45229	7467	15.2	518.2	78.6	15.2
JBHSTNDGA15	80	792	152	19.2	32.3	4.1	12.5
KUBLOND	285	3916	1801	46.0	27.9	11.2	39.9
LAIKEN10	46	141	36	25.4	16.7	2.5	14.9
LAZAR 23	68	26015	3857	14.8	400.9	54.3	13.5
LAZAR 24	180	67304	13852	15.9	517.1	75.8	14.7

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (10 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE TOTAL RCUBS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
LEAF 25	209	79257	20271	25.6	388.5	97.7	25.2
LEAF 35	245	97278	9999	10.3	397.1	40.8	10.3
LET 113	165	8764	2644	30.2	64.9	17.3	27.0
LKFED12A	24	116	34	79.2	24.3	3.0	12.5
LKFED132 ^a	139	55690	7266	13.0	413.9	50.9	12.3
LKFED18	88	2812	1365	49.3	91.6	33.7	36.8
LKFED189	13	2807	1317	46.9	259.5	108.4	41.7
LKFED382	7	0	0	0.0	0.0	0.0	0.0
LKFEDCV1	61	3985	1314	32.9	94.2	19.6	20.8
LKFEDT33	54	12	10	86.1	4.0	0.0	0.0
LUSCCP ^b	2312	11173	78658	40.7	143.3	57.0	39.8
MARINER4	39	452	1020	225.7	180.0	0.0	0.0
MAUL 34	235	26475	7906	27.9	127.4	34.1	26.8
MAUL 85	415	39456	9958	25.2	118.0	25.6	21.7
MCLISPERNKE	139	1759	192	10.3	34.7	2.6	7.4
MINNESOTA	50	746	55	7.4	28.5	1.5	5.3
MCCBERG	73	592	132	22.2	41.3	6.2	15.1
MUNITEN18	148	3416	266	3.4	59.0	3.8	6.5
MCCBERG2 ^c	5759	654787	54936	7.9	128.1	9.8	7.6
MRCETIS205	51	3317	807	24.3	66.6	20.5	23.7
MSESIM2	484	205958	32370	15.7	480.9	62.8	13.1

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (11 OF 16)

MANUFACTURER/NCDFI GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
AVITAC 16	43	1656	275	16.6	60.0	7.4	12.3
BABER B25	56	1429	294	20.6	42.8	7.5	17.6
BABER P51	150	4340	894	20.6	57.9	9.1	15.6
BABER MA260	69	1876	721	38.4	56.7	18.5	32.6
BABER T6	994	12176	3742	30.7	36.7	9.9	27.1
BABER W3B	160	4475	1709	38.2	63.1	26.2	31.5
BAVIONIC	617	31206	4569	14.6	70.4	8.9	12.6
NCBE SY4	52	1333	255	19.1	50.5	9.2	16.3
CALIFORNIA 9	41	1792	312	17.4	247.8	12.5	5.1
PICARDIX 6	173	5508	2247	40.8	49.9	17.1	34.3
PILATSB4	29	2297	163	8.0	90.4	6.4	7.1
PIPER 600	255	44353	6938	15.6	177.2	27.1	15.3
PIPER J2	66	317	68	21.6	18.2	3.1	17.3
PIPER J3	4382	132024	22339	16.9	58.0	8.2	14.2
PIPER J4	254	4475	318	7.1	43.7	2.1	4.9
PIPER J5	368	11639	1426	12.3	70.3	8.9	11.3
PIPER PA12	1391	79458	8960	11.3	88.4	9.5	10.8
PIPER PA14	111	6586	1262	18.4	80.3	12.2	15.2
PIPER PA15	201	4001	367	9.2	46.9	3.5	7.5
PIPER PA16	397	15374	4293	27.9	54.2	12.8	23.6
PIPER PA17	119	2584	523	20.1	40.8	6.7	16.3

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (12 OF 16)

MANUFACTURER/Model Group	Group Size	Estimate of Total Hours	Standard Error	Percent Standard Error	Estimate of Mean Hours	Standard Error	Percent Standard Error
PIPER PA18	3534	322088	38824	12.1	107.7	12.0	11.1
PIPER PA20	495	15501	2186	14.1	60.7	6.1	10.1
PIPER PA22	5298	243511	21026	8.6	71.4	5.9	8.3
PIPER PA23	3730	670105	78969	11.8	227.9	23.5	10.3
PIPER PA24	3335	400620	36601	9.1	129.1	11.1	9.6
PIPER PA25	1676	213971	43873	20.5	171.9	31.4	16.3
PIPER PA26	22209	4063133	206573	5.1	192.1	9.6	5.0
PIPER PA30	1324	242719	31676	13.1	184.0	23.9	13.0
PIPER PA31	1793	769232	106167	13.8	446.1	60.7	13.6
PIPER PA31T	365	161363	13334	8.3	442.1	36.7	8.3
PIPER PA32	4083	821002	76696	9.3	210.6	19.1	9.1
PIPER PA34	1095	565491	51164	9.0	302.1	27.2	9.0
PIPER PA36	356	108130	24114	22.3	343.9	71.3	20.7
PIPER PA39	1422	564570	66360	11.8	397.0	46.7	11.8
PIPER PA44	244	62524	12258	14.9	344.3	50.1	14.5
PRATT PRC1	21	43	23	54.3	6.0	3.8	12.8
PROJ1209	100	5652	704	3.4	114.9	9.9	6.7
RAKING65	58	3428	1045	30.5	115.0	34.3	25.8
RAVEN RX6	227	6328	758	12.0	29.7	3.2	10.8
RAVEN 550	116	3138	365	11.6	41.1	4.1	10.0
RAVEN 555	493	26831	5701	19.8	62.9	12.2	19.3

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (13 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PEAK HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
RAVEN S60	35	2998	551	18.4	103.7	17.5	16.9
REBELL112	764	115575	16527	14.3	160.0	21.8	13.6
REBELL1500	385	115889	25667	22.1	313.2	67.8	21.7
REBELL520	63	1967	510	25.9	51.7	11.9	22.9
REBELL1560	138	12974	1425	11.0	126.4	11.0	8.7
REBELL1680	390	45542	14161	31.1	146.5	40.2	27.5
REBELL680TF	129	41778	6126	14.7	394.5	37.8	9.6
REBELL1690TF	349	128245	11493	8.3	396.1	32.9	8.3
REBELL700	26	7652	583	7.6	320.3	22.5	7.0
REBELL11265	314	132008	16069	12.2	420.4	51.1	12.2
REBELL11222	45	9968	1616	16.2	228.0	36.4	15.9
RECHSCHLS	88	7137	1506	21.1	86.6	17.0	19.7
REIAW STA	169	13961	6406	45.9	131.6	47.6	36.2
REIAW STA	35	87	41	47.6	14.6	3.5	24.2
SCHLEBERS15	39	2447	246	10.1	62.7	6.3	10.1
SCHLEBERS19	52	3722	521	14.0	74.9	10.1	13.5
SCHLEBERS20	66	4535	290	6.4	72.8	4.5	6.2
SCHLEBERS	25	850	92	10.8	35.2	3.7	9.5
SCHLEBERS6	78	2346	338	14.4	33.0	4.4	13.2
SCHLEBERSG1	775	24216	6119	17.9	62.2	8.9	14.3
SCHLEBERSG2	623	107454	15032	14.0	198.6	25.2	12.7

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (14 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF INITIAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
SCUBAZONE3A	21	162	50	30.7	41.0	6.2	15.2
SEACO CLING15	32	848	439	51.7	46.4	21.4	46.2
SEACO MODEL1	35	1806	1665	92.2	296.4	228.6	77.1
SKYSKIS55	66	4254	989	23.2	270.2	24.9	9.2
SKYSKIS58	66	3454	741	21.4	208.4	32.4	15.5
SKYSKIS59T	23	9634	1556	16.6	416.9	63.4	16.6
SKYSKIS76	46	27562	8404	30.5	599.2	182.7	30.5
SL100S100	361	21561	1839	8.5	75.5	5.6	7.5
SMITH 600	197	52927	15880	30.0	304.0	85.4	28.1
SMITH 350	147	70268	40120	57.1	483.5	274.6	56.8
SMITH SM318	37	11416	2249	19.7	447.9	60.2	13.4
SCC100S694	45	38880	608	15.7	100.7	14.8	14.7
SCC100S111	43	6295	548	8.7	146.4	12.8	8.7
SPH100C100S	108	7433	1033	14.0	74.6	10.0	13.4
SPH100C100S	40	3087	770	24.9	77.2	19.2	24.9
SPH100S503	26	39451	8235	20.9	1517.3	316.7	20.7
SPH100S10	182	2285	296	13.0	42.7	4.4	10.3
SPH100S100	136	1685	470	27.9	33.1	5.9	15.0
SPH100S100	26	90	20	22.6	10.5	1.7	16.4
SPH100S100C3	250	3407	871	13.8	40.5	4.4	10.8
SPH100S100C4	108	1075	152	14.1	35.3	3.8	10.7

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (15 OF 16)

MANUFACTURER/MODEL GROUP	GRUPE SIZE	ESTIMATE	STANDARD ERROR	PERCENT OF MEAN HOURS	ESTIMATE	STANDARD ERROR	PERCENT OF MEAN HOURS	STANDARD ERROR
SUPAC V	26	308	56	18.2	34.1	4.1	12.1	
SWINGSA226	191	183448	32716	17.8	870.7	92.6	10.6	
SWINGSA26	115	41966	5003	11.9	410.8	46.7	11.4	
TCRAFIA	33	336	269	80.2	110.0	45.7	41.5	
TCRAFTEC	1952	56578	14084	24.7	55.3	12.4	22.5	
TCRAFTEF	44	439	119	27.1	34.5	7.8	22.5	
TCRAFTEL	236	5462	2055	37.6	53.7	15.3	26.5	
TEMCO 11A	31	714	73	10.3	40.5	3.1	7.6	
TRUNDAX7	39	1678	370	22.1	63.7	11.3	17.7	
TEFESCHAVIC	361	30444	7320	24.0	113.0	21.2	18.8	
THYMEK	34	187	49	26.0	20.7	3.8	18.1	
UNIVAGC1	705	25622	7743	21.7	74.6	12.7	17.0	
UNIVAG108	2268	85828	15915	17.6	62.0	8.9	14.3	
UNIVAG15	2594	54822	17772	18.7	56.7	9.2	16.3	
VARGA 2150	136	10389	1154	11.1	82.3	8.7	10.6	
VICKES745	17	1812	798	44.0	137.8	48.0	34.8	
WACC A50	32	196	54	27.2	32.9	2.6	8.0	
WACC G1E	36	344	121	35.3	31.8	9.4	29.7	
WACC S	34	186	52	27.8	17.4	2.5	16.3	
WACC U	29	113	24	21.0	24.4	2.0	8.1	
WACC UPP7	162	3983	431	10.8	51.2	4.9	9.6	

TABLE 2-5 GENERAL AVIATION ACTIVE ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1980 (16 OF 16)

MANUFACTURER/ACFT GROUP	GROUP SIZE	ESTIMATE C ₁ TOTAL SECURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
					MEAN		
WACCO TK	56	497	120	24.1	41.3	6.2	19.9
WACCOER65	368	9457	9748	103.1	73.3	72.5	99.0
WTHBL1201	77	16125	4056	25.2	222.0	53.9	24.3
TOTAL	255761	41015542	645883	1.6	190.5	3.0	1.58

TABLE 2-6 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT - CY 1980 (1 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING						
PISTON	85024	60505	688	1.1	71.2	0.8
1 ENG 1-3 SEATS	115065	107930	538	0.5	90.6	0.5
1 ENG 4+ SEATS	204089	168435	874	0.5	82.5	0.4
TOTAL 1 ENG		18529	16224	1.5	87.6	1.3
2 ENG 1-6 SEATS	9701	8141	153	1.9	83.9	1.6
2 ENG 7+ SEATS	26230	24366	290	1.2	86.3	1.0
TOTAL 2 ENG		383	212	17	8.0	6.4
OTHER PISTON	232702	193014	921	0.5	82.9	0.4
TOTAL PISTON		3440	3339	41	1.2	1.2
TURBOPISTON	683	627	18	3.0	91.9	2.7
2 ENG 1-12 SEATS	4123	3966	45	1.1	96.2	1.1
2 ENG 13+ SEATS	159	123	10	6.4	77.5	6.5
TOTAL TURBOPISTON		4292	4090	46	1.1	95.5
TOTAL TURBOPISTON		2674	2551	37	1.5	95.4
2 ENG	726	441	13	3.0	60.8	1.8
OTHER	3400	2992	40	1.3	89.0	1.2
TOTAL TURBOJET	240384	200097	923	0.5	83.2	0.4
TOTAL FIXED WING		5502	2794	133	4.8	50.6
MOTORCRAFT PISTON						2.4

TABLE 2-6 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT - CY 1980 (2 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE
					CF						
TURBINE	3506	3207	49	1.5	91.5	1.4	1.6	66.6	1.6	1.6	77.6
TOTAL ROTONCRAFT	9008	6001	142	2.4	2.4	2.2	2.2	77.6	2.2	2.2	82.5
OTHER	6369	4945	142	2.9	2.9	0.4	0.4	82.5	0.4	0.4	82.5
TOTAL AIRCRAFT	255761	211045	945	0.4	0.4	0.4	0.4	82.5	0.4	0.4	82.5

TABLE 2-7 GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT - CY 1980 (1 OF 3)

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	2772	336	2063	295	75.2	14.0
ALASKA	7423	476	6465	453	87.1	8.3
ARIZONA	6079	496	4601	461	80.3	10.0
ARKANSAS	3019	352	2612	332	86.5	16.9
CALIFORNIA	35056	1118	29855	1061	85.2	4.1
COLORADO	5454	480	4768	454	87.4	11.3
CONNECTICUT	1055	276	1615	261	87.1	19.2
DELAWARE	629	159	548	151	87.2	32.7
DC	73	52	59	50	81.3	90.3
FLORIDA	13396	726	11347	682	86.7	6.9
GEORGIA	5056	461	4612	437	87.3	11.6
HAWAII	460	130	365	123	82.4	35.0
IDAHO	2577	326	2094	302	81.3	15.6
ILLINOIS	10563	655	6990	618	85.1	7.9
INDIANA	4662	487	4248	426	87.4	11.9
KANSAS	4601	439	4194	427	91.1	12.7
KENTUCKY	4792	456	4190	430	87.4	12.3
LOUISIANA	1978	293	1610	284	91.5	19.8
MAINE	4045	492	3625	385	89.6	13.1
MARYLAND	1557	255	1341	240	86.1	26.9
MONTANA	3180	370	2755	350	86.6	14.9

TABLE 2-7 GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT - CY 1980 (2 OF 3)

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR OF ACTIVE POPULATION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR OF ACTIVE POPULATION	PERCENT ACTIVE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR OF ACTIVE POPULATION
MISSACHENSISS	3391	377	3044	361	89.7	14.6			
MICHIGAN	8773	597	7243	559	82.6	8.5			
MINNESOTA	6201	502	5287	472	85.3	10.3			
MISSISSIPPI	2668	337	2199	309	82.4	15.6			
MISSOURI	9843	659	4069	432	84.0	12.0			
NEBRASKA	2648	343	2269	320	85.7	16.4			
NEVADA	2177	304	1805	283	83.1	17.4			
NEW HAMPSHIRE	2444	320	2145	303	87.8	16.9			
NEW JERSEY	1388	238	1100	217	79.3	20.8			
NEW MEXICO	2310	299	2041	283	88.4	16.6			
NEW YORK	7686	557	6278	514	81.7	8.9			
North Carolina	4057	412	3542	392	87.3	13.1			
North Dakota	2001	300	1684	279	84.2	18.8			
CHICAGO	9792	635	8283	597	84.6	8.2			
CHICAGO	5475	687	4812	464	87.9	11.6			
CHICAGO	6059	523	5967	493	87.0	9.8			
PENNSYLVANIA	7551	582	6167	496	81.7	8.0			
PROVIDENCE ISLAND	417	137	358	130	85.9	42.2			
SOUTH CAROLINA	2220	311	1907	296	85.9	18.0			
SCOTIA DARCTIA	1517	257	1386	251	91.3	22.7			
THOMASSEN	2237	371	2824	358	87.2	14.8			
TEXAS	21260	886	18674	845	87.9	5.4			
UTAH	1608	259	14666	250	91.2	21.4			
VERMONT	535	145	471	137	88.0	35.1			
WIRGINIA	3535	386	3013	363	85.2	13.9			

TABLE 2-7 GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT - CY 1980 (3 OF 3)

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
WASHINGTON	8039	575	6483	529	80.6	8.8
WEST VIRGINIA	1322	242	1060	219	80.2	22.2
WISCONSIN	5292	469	4369	434	82.9	11.0
WYOMING	1201	228	1143	217	87.8	22.8
Puerto Rico	251	94	201	66	80.1	46.2
CITIES U.S. TERRITORIES	104	60	73	53	70.4	65.7
FOREIGN	807	144	544	119	67.4	19.1
TOTAL	255761	211045	945	82.5	0.4	

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-8 GENERAL AVIATION ACTIVE AIRCRAFT BY REGION OF BASED AIRCRAFT - CY 1980

REGION	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALASKAN	7423	476	6465	453	87.1	8.3
CENTRAL	16614	817	14264	778	86.9	6.4
EASTERN	28702	1031	24021	963	83.7	4.5
EUROPEAN	375	94	243	70	65.0	25.0
GREAT LAKES	45486	1252	38443	1150	84.5	3.5
NEW ENGLAND	9146	607	7931	575	86.7	8.5
NORTHWESTER ¹	17520	824	14576	168	83.2	5.9
PACIFIC	594	141	411	125	69.2	26.7
ROCKY MOUNTAIN	14533	768	12718	729	87.5	6.8
SOUTHERN	35645	1137	30596	1075	85.1	4.0
SOUTHWESTER ¹	36151	1122	31817	1074	88.0	4.0
WESTERN	43581	1222	36883	1160	84.6	3.6
TOTAL	255761	211045	945	82.5	0.4	

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES

TABLE 2-9 GENERAL AVIATION AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1980
(1 OF 4)

TCTAL ACTIVE	EXPC- UTIVZ	BUSI- NESS	PERSON- NEL	AERIAL APPL	ACTIVE USES			INDUS- TRIAL	REP- TAL	OTHER	INACTIVE
					INSIR	COMMUTER	AIR CARRIER				
FIXED WING											
PISTON											
1 ENG 1-3 SEATS											
EST. BC. ACT.	6055	151,10. % SID. 6505	755	4230	36929	5779	6376	0	46	450	2471
STD. 25RCB	688								D	D	B
EST % ACT.	71.2										A
1 PEG 4+ SEATS											
EST. BC. ACT.	107930	151,10. % SID. 1100	2446	34143	52321	392	4978	105	2899	1032	6246
STD. 25RCB	518								B	B	A
EST % ACT.	10.6										A
TCTAL 1 PEG											
EST. BC. ACT.	168835	151,10. % SID. 1100	3202	38374	69250	6160	13357	105	2945	1483	10718
STD. 25RCB	879								B	B	A
EST % ACT.	82.5										A
2 PEG 1-6 SEATS											
EST. BC. ACT.	16224	151,10. % SID. 1100	2970	7303	2464	123	533	167	1599	256	322
STD. 25RCB	246								D	D	C
EST % ACT.	87.6										B

STANDARD ERROR	CODE
GREATER THAN	
LESS THAN	
OR	
EQUAL TO	
0 %	10 %
10 %	20 %
20 %	30 %
30 %	D

TABLE 2-9 GENERAL AVIATION AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1980
(2 OF 4)

TOTAL ACTIVE	HIC- DRIVE	BUSI- NESS	PESSNL APPL	ACTIVE USES				INDUS- TRIAL	REN- TAL	OTHER	INACTIVE
				INST	COMMER	AIR CARRIER	AIR TAXI				
2 HIC 7+ SEATS EST. NO. ACT. STD. 3803 EST. % ACT.	8141 153 83.9	EST. NO. % STD. 3803	2770 A	2016 C	190 C	46 E	395 C	1580 D	85 D	156 D	327 C
TOTAL 2 HIC EST. NO. ACT. STD. 3803 EST. % ACT.	28366 290 86.3	EST. NO. % STD. 3803	5640 A	9320 A	3039 C	513 C	542 C	3179 A	361 D	479 C	931 B
OTHER PILOTS EST. NO. ACT. STD. 3803 EST. % ACT.	212 17 55.6	EST. NO. % STD. 3803	2 D	22 D	11 B	0 A	24 B	13 C	0 A	31 D	32 C
TOTAL PILOTS EST. NO. ACT. STD. 3803 EST. % ACT.	193014 921 82.9	EST. NO. % STD. 3803	8845 A	47717 A	92301 A	6548 A	13534 B	6139 A	16224 B	11229 A	3800 A
ROBOPC/P 2 HIC 12 SEATS EST. NO. ACT. STD. 3803 EST. % ACT.	3339 41 97.1	EST. NO. % STD. 3803	2410 A	361 C	8 D	0 A	0 A	27 D	371 C	6 D	63 D
2 HIC 13+ SEATS EST. NO. ACT. STD. 3803 EST. % ACT.	627 18 91.9	EST. NO. % STD. 3803	185 A	47 D	1 A	0 A	1 B	220 C	119 D	2 A	48 D
CODE											
STANDARD ENGINES											
CARTER THIN											
LESS THAN QB											
TOTAL TO											
0 K											
10 K											
20 K											
30 K											
40 K											

TABLE 2-9 GENERAL AVIATION AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1980
(3 OF 4)

TOTAL ACTIV		ACTIVE USES						INACTIVE		
		BUSI- UTIV	BUSI- WISS	PERSNL	AERIAL APPL	INSTR	COMMUTER	AIR TAXI	INDUS- TRIAL	REN- TAL
TOTAL 2 ENG										
EST. NO. ACT.	3566	EST. NO. X SIC. EFOR	2595	409	10	0	1	248	490	9
STD. NUMBER	95				D	A	D	E	D	63
EST. % ACT.	96.2								D	138
OTHERS									C	156
TURBOFJOP										
EST. NO. ACT.	123	EST. NO. X SIC. EFOR	4	11	0	0	0	0	10	0
STD. NUMBER	10				C	A	B	D	A	23
EST. % ACT.	77.5								C	14
TOTAL TURBOFJOP									C	
EST. NO. ACT.	4830	EST. NO. X SIC. EFOR	2600	420	10	58	1	256	501	6
STD. NUMBER	46				D	B	E	B	D	70
EST. % ACT.	95.5								D	161
OTHERS									C	190
TURBOJET										
2 ENG		EST. NO. ACT.	2551	EST. NO. X SIC. EFOR	2064	90	0	0	49	9
		STD. NUMBER	37		D	A	A	D	D	172
		EST. % ACT.	95.4						C	23
OTHERS									D	2
TURBOJET									D	118
EST. NO. ACT.	491	EST. NO. X SIC. EFOR	266	19	6	0	3	0	14	0
STD. NUMBER	13			B	C	A	A	D	A	42
EST. % ACT.	60.9								D	36
OTHERS									C	4
TOTAL TURBOJET									C	294
EST. NO. ACT.	2992	EST. NO. X SIC. EFOR	2350	110	3	0	52	5	197	23
STD. NUMBER	80			D	C	A	D	D	D	417
EST. % ACT.	89.0								B	25
OTHERS									C	4
* STANDARD ERROR * GREATER THAN * LESS THAN * EQUAL TO * CONDZ										
* 0 % * 10 % * 20 % * 30 %										

TABLE 2-9 GENERAL AVIATION AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1980
(4 OF 4)

TOTAL ACTIVE	ACTIVE USES						INACTIVE
	BUSINESS TRAVEL	BUSINESS MESS	AIRMAIL APPL	INSTR CARRIER	AIR TAXI	INDUS- TRIAL	
TOTAL PILOT SING EST. NO. ACT. STD. 1980 EST X ACT.	200097 923 83.2	EST. NO. X STD. 1980 EST X ACT.	13796 A	92320 A	6607 A	13588 A	940 B
MOTORCRAFT PISTON	2794 133 50.8	EST. NO. X STD. 1980 EST X ACT.	71 D	419 B	560 B	587 C	254 A
TURBINE	3207 49 91.5	EST. NO. X STD. 1980 EST X ACT.	875 B	329 D	31 D	97 D	19 D
TOTAL MOTORCRAFT EST. NO. ACT. STD. 1980 EST X ACT.	6001 142 66.6	EST. NO. X STD. 1980 EST X ACT.	947 B	749 B	592 B	684 C	274 C
CTHIS	4945 142 77.6	EST. NO. X STD. 1980 EST X ACT.	116 D	393 B	3308 A	1 D	598 E
TOTAL AIRCRAFT EST. NO. ACT. STD. 1980 EST X ACT.	211045 945 82.5	EST. NO. X STD. 1980 EST X ACT.	14860 3.6	9391 2.3	96222 1.3	7294 3.7	14862 4.8

CODE	STANDARD ERROR		
	GREATER THAN	LESS THAN	EQUAL TO
0.1	10 %	4	
10 %	20 %	3	
20 %	30 %	2	
30 %	40 %	1	

NOTE: SOME ADDITIONAL SUBTOTALS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-10 GENERAL AVIATION ACTIVE AIRCRAFT IFR FLOWN AND TRANSPONDER EQUIPPED - CY 1980
(1 OF 2)

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLown IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLown IFR	ESTIMATED NUMBER OF A/C FLown IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING						
PISTON						
1 IFR 1-3 SEATS	3764	B	6.2	3325	B	80.8
1 IFR 4+ SEATS	54022	A	50.8	54342	A	99.1
TOTAL 1 IFR	56566	A	34.8	57667	A	98.5
2 IFR 1-6 SEATS	14912	A	91.9	14912	A	100.0
2 IFR 7+ SEATS	8026	A	98.6	8026	A	100.0
TOTAL 2 IFR	22939	A	94.1	22939	A	100.0
OTHER PISTON	212	A	100.0	212	B	100.0
TOTAL PISTON	81718	A	42.3	80886	A	99.0
TOBACCOCP						
2 IFR 1-12 SEATS	3139	A	100.0	3339	A	100.0
2 IFR 13+ SEATS	627	A	100.0	627	A	100.0
TOTAL 2 IFR	3966	A	100.0	3966	A	100.0
CRATE TOSEOBOP	62	B	50.5	53	B	85.6
STANDARD ERROR						
CODE						
STANDARD ERROR						
GREATER THAN OR EQUAL TO						
CODE						
0 %						
10 %						
20 %						
30 %						

TABLE 2-10 GENERAL AVIATION ACTIVE AIRCRAFT IFR FLOWN AND TRANSPONDER EQUIPPED - CY 1980
(2 OF 2)

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
TOTAL 109808CP	4029	A	98.5	4029	A	100.0
TURBOJET 2 ENG	2551	A	100.0	2551	A	100.0
OTHERS	441	A	100.0	441	A	100.0
TOTAL TURBOJET	2992	A	100.0	2992	A	100.0
TOTAL FIXED WING	68740	A	44.3	68201	A	44.4
MOTORCRAFT PISTON	112	D	4.0	85	D	78.6
TURBINE	291	C	9.1	291	C	100.0
TOTAL MOTORCRAFT	404	B	6.7	380	B	94.2
CARS	8	D	0.2	8	D	100.0
TOTAL AIRCRAFT	69154	A	42.2	68591	A	99.4

NOTE : COLUMNS SUBTOTALS MAY DIFFER FROM PRINTED SUBTOTALS AND TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR	CODE
GREATER THAN	
OR	
EQUAL TO	
0 %	10 %
10 %	20 %
20 %	30 %
30 %	D

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (1 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
011111 01	995	4591	307	6.7	45.9	3.1
011111 02	996	592	41	7.0	59.5	4.1
011111 03	432	333	36	10.6	77.1	9.3
011111 04	160	41	10	23.4	29.5	6.9
011111 05	66	59	6	9.4	66.9	6.3
011111 06	116	105	5	4.3	90.9	3.9
011111 07	206	189	12	6.3	91.9	5.0
011111 08	56	41	6	15.5	72.6	11.2
011111 09	368	305	32	10.6	82.8	8.8
011111 10	172	69	5	7.6	40.3	3.0
011111 11	1726	435	35	8.0	25.2	2.0
011111 12	203	152	11	7.3	74.8	5.5
011111 13	181	1121	114	10.2	61.9	6.3
AEAEAE A505	42	41	1	2.0	97.5	2.0
AEAEAEJ2	41	17	6	35.0	42.3	10.6
AEAEAEPSA316	124	121	5	3.9	97.6	3.8
AEAEAEPSA341	68	41	12	28.3	60.0	17.0
AC0571205	70	68	5	7.2	97.8	7.0
AIRPASA	292	170	29	17.2	58.3	10.1
AIRSPC18	25	9	2	24.9	36.7	9.2
ASIANCAR300	244	244	0	0.0	100.0	0.0

NOTE: SEE FOLLOWING PAGE FOR CODING.

NOTE: Other XX refers to all general aviation aircraft belonging to manufacturer/model groups of fewer than 20 aircraft in size for aircraft XX where XX stands for

- 01 Fixed wing piston, 1 engine, 1-3 seats.
- 02 Fixed wing piston, 1 engine, 4+ seats.
- 03 Fixed wing piston, 2 engine, 1-6 seats.
- 04 Fixed wing piston, 2 engine, 7+ seats.
- 05 Fixed wing piston, other.
- 06 Fixed wing turboprop, 2 engines, 1-12 seats.
- 07 Fixed wing turboprop, 2 engines, 13+ seats.
- 08 Fixed wing turboprop, other.
- 09 Fixed wing turbojet, 2 engines.
- 10 Fixed wing turbojet, other.
- 11 Rotorcraft, piston.
- 12 Rotorcraft, turbine.
- 13 Other aircraft.

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
 CY 1980 (2 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AND FALC10	115	92	12	12.7	79.6	10.1
AND FALC20	178	176	0	0.0	100.0	0.0
ARCI BEECH37	46	0	0	0.0	0.0	0.0
ARCI C51A	93	35	3	8.6	37.1	3.2
ARCI C51B1	27	9	2	16.4	33.8	6.2
ARCI C15	206	130	4	3.4	63.0	2.2
ARCI C165	150	75	4	5.4	50.3	2.7
ARCI CAC3	52	7	4	57.9	14.3	8.3
ARCI CAC56	168	69	19	28.1	41.2	11.6
AVIAN PALCO	24	22	1	4.9	92.0	4.5
ATLUS S2	940	707	74	10.5	75.2	7.9
BAC 111	28	28	0	0.0	100.0	0.0
BAC B206	37	37	0	0.0	100.0	0.0
BAC DH 125	42	42	0	0.0	100.0	0.0
BAC JETSTAR	26	25	2	7.8	94.9	7.4
BAE/KEPSPIRENT	642	601	33	5.6	93.6	5.2
BIRCH 100	242	242	0	0.0	100.0	0.0
BIRCH 17	196	103	7	7.3	52.3	3.8
BIRCH 18	1113	553	108	19.5	49.7	9.7
BIRCH 200	503	502	5	1.0	99.7	1.0
BIRCH 23	2863	2596	97	3.7	90.7	3.4

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (3 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 33	1617	1593	29	1.8	98.5	1.6
BEECH 35	7142	6611	148	2.2	92.6	2.1
BEECH 36	1473	1349	57	4.3	91.6	3.9
BEECH 45	324	230	36	15.5	71.1	11.0
BEECH 50	372	248	19	7.5	66.6	5.0
BEECH 55	2222	2094	69	3.3	94.2	3.1
BEECH 56	68	64	4	5.7	93.5	5.3
BEECH 58	1164	1117	34	3.1	96.0	3.0
BEECH 60	389	389	0	0.0	100.0	0.0
BEECH 65	166	161	13	7.8	97.0	7.6
BEECH 76	263	239	19	6.1	90.9	7.4
BEECH 77	149	147	1	6.1	98.9	0.9
BEECH 80	234	150	39	25.2	63.9	16.1
BEECH 90	873	870	9	1.0	99.6	1.0
BEECH 95	491	468	24	5.2	95.3	5.0
BEECH 99	90	86	5	5.6	95.4	5.7
PIPER 204	148	106	3	2.9	71.7	2.1
PIPER 206	1733	1730	11	0.6	99.9	0.6
PIPER 212	141	141	0	0.0	100.0	0.0
PIPER 47	1563	952	102	10.7	60.9	6.5
PIPER 111	995	419	75	17.9	42.1	7.5

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
 CY 1980 (4 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ELANCA1413	393	112	7	6.0	36.9	2.2
ELANCA1419	307	221	27	12.0	72.1	8.7
ELANCA17	1101	1040	18	1.8	94.4	1.7
ELANCA7	6177	314	221	5.1	65.8	3.6
ELANCA8	738	649	43	6.6	87.9	5.8
EMCFB B62	70	62	4	7.1	88.1	6.3
FOURING737	60	28	4	13.0	46.6	6.1
FOURING720	24	6	1	24.4	25.3	6.2
BOEING727	153	159	3	0.0	100.0	0.0
FOURING717	39	39	3	0.0	100.0	0.0
FOURING747	6	6	0	0.0	100.0	0.0
FOURING75	2053	811	127	15.7	39.5	6.2
PC14B5105	66	55	5	9.9	83.6	8.2
ERABCDH125	36	95	0	0.0	99.0	0.0
ERASOVIS28	53	46	2	4.5	86.1	3.9
ERUSTAPLE712	29	9	1	15.2	30.0	4.6
ERUSTAPLE717	22	9	2	26.9	40.4	10.9
BUKER 131	29	14	4	31.1	47.5	14.8
CAPIONBCDB1C	195	105	0	0.0	100.0	0.0
CCCFBTB78211	41	29	4	13.7	70.3	9.6
CESSNA120	932	623	66	10.6	66.9	7.1

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (5 of 16)

MANUFACTURER/SOCIAL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA140	2523	1907	124	6.5	75.6	4.9
CESSNA150	20131	17997	312	1.7	89.4	1.5
CESSNA170	2585	2399	93	3.4	92.4	3.2
CESSNA172	26519	23219	261	1.1	94.7	1.1
CESSNA175	1437	1224	83	6.7	65.2	5.7
CESSNA177	3055	2941	61	2.1	56.3	2.0
CESSNA180	2622	2520	92	3.7	89.3	3.3
CESSNA182	13620	12877	180	1.4	94.5	1.3
CESSNA185	1477	1387	53	3.8	93.9	3.6
CESSNA188	1941	1722	87	5.0	88.7	4.5
CESSNA190	86	55	4	7.6	62.3	4.7
CESSNA195	517	341	15	4.4	65.9	2.9
CESSNA206	2950	2772	81	2.9	94.0	2.7
CESSNA207	380	310	34	11.1	81.5	9.0
CESSNA210	6156	5646	150	2.7	91.7	2.4
CESSNA305	265	202	28	13.9	76.3	10.6
CESSNA310	3360	2850	134	4.7	84.8	4.0
CESSNA320	364	306	33	10.8	84.1	9.1
CESSNA335	38	31	4	11.5	81.9	9.4
CESSNA336	100	79	3	4.3	79.5	3.4
CESSNA337	1362	1336	31	2.3	58.2	2.3

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
 CY 1980 (6 OF 16)

MANUFACTURER/MODEL GROUP	ACTIVE SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
C133BA00	826	743	43	5.8	90.0	5.3
C133BA01	261	260	5	1.7	99.5	1.7
C133BA02	670	624	37	5.9	93.1	5.5
C133BA04	162	93	24	25.8	65.8	17.0
C133BA05	178	152	16	10.7	85.7	9.2
C133BA06	688	625	46	7.3	91.9	6.7
C133BA07	1217	1217	0	0.0	100.0	0.0
C133BA08	127	127	0	0.0	100.0	0.0
C133BA09	350	350	0	0.0	100.0	0.0
C133BA09	83	22	12	52.1	27.1	14.1
C133BA09	21	10	3	30.6	48.4	14.9
C133BA09	37	13	2	14.7	34.4	5.1
CH11D S2	128	121	4	3.1	94.9	2.9
CC087015	167	36	5	13.1	33.8	4.4
CC087016	886	438	11	2.4	90.2	2.2
CC087016	48	18	4	20.2	38.1	7.7
CC087016	21	4	2	38.8	19.0	7.4
CC087016	34	3	1	28.6	9.8	2.8
CC087016	193	41	3	7.3	22.3	1.6
CVAC 22	41	6	1	19.4	14.5	2.8
CVAC 240	62	19	4	19.0	30.3	5.8

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (7 of 16)

MANUFACTURER/SDR GROUP SIZE	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CVAC 349	29	23	6	25.2	77.9	19.6
CVAC 440	27	14	9	68.0	50.0	34.0
CVAC 5713	98	36	6	15.7	36.6	5.7
CVAC L13	21	4	3	78.1	20.0	15.6
CVAC STC560	44	39	1	3.8	89.0	3.4
CART 6	26	8	2	19.5	30.4	5.9
CBAY DRC1	89	89	0	0.0	100.0	0.0
CBAY DRC2	351	222	45	20.1	63.1	12.7
CBAY XDR2	105	64	10	15.3	61.2	9.4
DCUG A26	69	31	6	17.9	44.9	8.0
DCUG DC10	0	0	0	0.0	0.0	0.0
DCUG DC3	469	290	48	16.7	61.6	10.3
DCUG DC4	91	35	9	26.5	38.6	10.2
DCUG DC6	113	60	12	19.7	52.7	10.4
DCUG DC7	48	34	4	12.0	71.5	8.6
DCUG DC8	61	27	9	33.7	44.9	15.2
DCUG DC9	25	19	3	15.5	76.6	11.9
DCUG DC20	105	104	3	2.6	98.7	2.6
EMIAIR BA1	20	5	3	53.1	17.2	9.1
EMB 110	31	31	0	0.0	100.0	0.0
EMB100726	437	361	13	3.6	82.6	3.0

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (8 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER 16B	25	12	2	16.9	48.5	9.2
PIPER24	319	79	14	18.4	24.6	4.5
PIPERC119	26	16	1	6.8	60.0	5.3
PIPER27	32	25	2	7.6	79.6	6.1
PIPER62	244	60	24	30.7	32.6	10.0
Cessna16	37	37	0	0.0	100.0	0.0
Cessna172	163	146	7	4.5	89.4	4.1
Cessna 172	51	48	3	5.5	93.3	5.2
Cessna210	190	127	4	3.4	70.8	2.4
Cessna200	35	21	7	33.8	59.2	20.0
Cessna11	646	565	23	4.1	87.5	3.6
Cessna185	1064	1017	43	4.2	95.6	4.0
Cessna164	627	613	22	3.6	97.8	3.5
Cessna21	63	8	6	72.4	13.1	9.5
Cessna11	661	566	46	8.1	65.7	6.9
Cessna5	999	957	35	3.7	95.9	3.5
Cessna1159	160	148	0	0.0	100.0	0.0
Cessna153	153	153	0	0.0	100.0	0.0
Cessna164	974	739	82	11.1	75.9	8.4
Cessna44	91	68	6	8.4	75.1	6.3
Cessna73	26	21	2	6.7	79.5	6.9

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (9 of 16)

MANUFACTURER/SDR GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD PERCENT
CIVIL STNG 17	64	55	6	10.4	86.0	8.9
FBIIC 8250	21	18	2	9.2	85.1	7.8
FBI 10 8235	108	91	5	6.3	75.4	4.7
FBIIC 8191	27	16	3	16.5	59.5	9.3
FBI 10 8395	24	20	2	8.1	83.9	6.8
FBI 10 81100	74	42	16	35.9	58.4	21.0
FBI 10 8112	688	478	55	11.4	69.5	8.0
FDC 10 8269	709	471	54	11.4	66.4	7.6
FDC 10 8369	478	393	41	10.3	82.3	8.5
FBI 10 8104	46	12	3	25.0	26.3	6.6
FBI 10 8104	43	25	4	16.6	58.3	9.6
FBI 10 8125	37	31	4	11.8	84.5	9.9
BYERS 82	136	75	5	6.0	55.3	3.3
ISB 811121	117	112	5	4.5	95.7	4.3
ISB 811123	21	21	0	0.0	100.0	0.0
ISB 811124	95	95	0	0.0	100.0	0.0
JBB ST 82G 815	30	25	4	14.5	30.7	4.5
ROBICHD	285	140	32	22.8	49.2	11.2
LAIRFB 817	46	8	2	20.5	18.4	3.8
LEAS 23	68	65	4	6.0	95.4	5.8
LEAS 24	180	169	10	6.1	93.8	5.7

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
(CY 1980 (10 of 16))

MANUFACTURER/Model Group	Group Size	Estimate of Active Aircraft	Standard Error	Percent Standard Error	Estimate of Active	Percent Active	Standard Error
LIAIR 25	209	204	9	4.6	97.6	4.5	
LIAIR 35	245	245	0	0.0	100.0	0.0	
LST L13	185	137	18	13.5	74.0	10.0	
LKFED12A	24	5	4	78.2	20.2	15.8	
LKFED1329	139	135	6	4.4	96.8	4.2	
LKFED16	88	31	10	32.7	34.9	11.4	
LKFED188	13	11	2	21.5	83.1	17.9	
LKFED32	7	0	0	0.0	0.0	0.0	
LKFEDPP1	61	42	11	25.5	69.4	17.7	
LKFEDT33	54	3	3	66.1	5.6	4.8	
LOSCONS	2312	1348	116	8.6	58.3	5.0	
MARTINETS	34	3	6	225.7	7.4	16.7	
MAULI M4	285	224	16	7.4	78.4	5.8	
MAULI M5	415	334	43	12.8	80.6	10.4	
MC118PUNKI	133	51	4	7.2	36.5	2.6	
MELISSORY	50	26	1	5.1	52.3	2.7	
MCCUP90	73	14	2	16.3	19.7	3.2	
MSP17818	148	58	3	5.4	35.1	2.1	
MCCURRY20	57.59	5425	110	2.0	94.2	1.9	
MCHT15205	51	38	2	5.5	75.0	4.2	
MSES1802	494	428	37	8.7	88.5	7.7	

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (11 of 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ACROSTIC 16	49	28	3	11.1	56.4	6.3
ACROSTIC 25	56	33	4	10.6	59.7	6.3
ACROSTIC 51	150	75	10	13.3	50.0	6.6
ACROSTIC 260	69	33	7	20.3	48.0	9.7
ACROSTIC T6	964	332	48	14.5	68.5	9.9
ACROSTIC 110	160	54	12	21.6	33.7	7.3
ACROSTIC 115	617	443	33	7.4	71.9	5.3
ACROSTIC 374	52	26	3	10.0	50.8	5.1
ACROSTIC 119	41	7	1	16.7	17.6	2.9
ACROSTIC 173	111	24	24	22.0	63.9	14.1
ACROSTIC 29	25	1	3.7	87.6	3.2	
ACROSTIC 255	250	8	3.4	98.2	3.3	
ACROSTIC 600	66	17	2	12.9	26.4	3.4
ACROSTIC 33	4382	2278	209	9.2	52.0	4.8
ACROSTIC 34	254	102	5	5.2	40.3	2.1
ACROSTIC 35	368	149	7	4.7	40.4	1.9
ACROSTIC 212	1391	899	30	3.3	64.6	2.2
ACROSTIC 214	111	87	9	10.2	78.3	8.0
ACROSTIC 215	201	65	5	5.3	42.5	2.2
ACROSTIC 216	397	284	42	15.0	71.4	10.7
ACROSTIC 217	119	63	7	11.8	53.2	6.3

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
LY 1980 (12 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR
PIPER PA 18	3534	2991	138	4.6	84.6	3.9
PIPER PA 20	495	255	25	9.8	51.6	5.1
PIPER PA 22	5296	3436	105	3.0	64.8	2.0
PIPER PA 23	3730	2941	169	5.7	77.6	4.5
PIPER PA 24	3395	3103	39	3.2	91.4	2.9
PIPER PA 25	1676	1245	116	9.3	74.3	6.9
PIPER PA 26	22209	21166	203	1.0	95.3	0.9
PIPER PA 30	1324	1319	12	0.9	99.6	0.9
PIPER PA 31	1790	1724	44	2.6	96.3	2.5
PIPER PA 31T	365	365	0	0.0	100.0	0.0
PIPER PA 32	4083	3899	87	2.2	95.5	2.1
PIPER PA 34	1885	1885	0	0.0	100.0	0.0
PIPER PA 36	356	314	26	8.2	88.3	7.3
PIPER PA 38	1422	1422	0	0.0	100.0	0.0
PIPER PA 44	244	240	7	3.0	98.2	3.0
PRATT PRG1	21	7	4	52.8	33.7	17.8
SCIMITAR 200	100	84	3	3.6	84.0	3.0
BANKING 5	58	30	2	6.4	51.4	3.3
RAVEN RX 6	227	213	11	5.2	93.7	4.8
RAVEN SS 50	116	76	5	6.0	65.6	3.9
RAVEN SS 55	483	458	19	4.1	94.9	3.9

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (13 OF 16)

MANUFACTURER/MODEL G/CUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF ACTIVE	STANDARD ERROR
RAVEN S60	35	29	2	7.3	82.6	6.1
REVELL1112	764	722	31	4.3	94.5	4.1
REVELL1500	385	370	17	4.6	96.1	4.4
REVELL1520	63	38	5	12.1	60.4	7.3
REVELL1560	138	103	7	6.7	74.4	5.0
REVELL1680	390	312	44	14.1	80.7	11.3
REVELL1680TP	129	106	12	11.1	82.1	9.1
REVELL1690TP	349	349	0	0.0	100.0	0.0
REVELL1700	26	24	1	3.0	91.9	2.7
REVELL18265	314	314	0	0.0	100.0	0.0
SCOPSIIB22	45	44	1	2.9	57.2	2.8
FC15C1LS	88	82	6	7.6	93.7	7.2
RYAN ST3	165	106	30	28.2	62.8	17.7
RYAN STA	35	6	2	41.0	16.9	6.9
SCHUBER15	39	39	0	0.0	100.0	0.0
SCHUBER15W19	52	50	2	3.5	95.6	3.4
SCHUBERASW20	66	62	1	1.7	94.4	1.6
SCHUBER9	25	22	1	5.1	86.7	4.4
SCHUBER96	78	71	4	5.7	91.1	5.2
SCUBERASG1	775	550	59	10.7	71.0	7.6
SCUBERASG2	623	540	32	5.9	86.8	5.1

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (14 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SCW216TGJA	21	4	1	26.7	18.9	5.0
SEACO CLINGER	32	10	4	23.2	57.1	13.3
SEACO MODEL 1	35	6	3	50.5	17.4	8.8
SKBSK555	86	16	3	21.3	18.3	3.9
SKBSK558	66	17	2	14.8	25.1	3.7
SKBSK558T	23	23	0	0.0	100.0	0.0
SKBSK576	46	46	0	0.0	100.0	0.0
SLIBDS100	361	285	12	4.2	79.0	3.3
SMITH 600	197	174	18	10.5	89.4	9.3
SMIAS 350	147	145	9	5.9	98.9	5.8
SMIAS SA318	37	25	4	14.4	68.9	9.9
SCCATAMS894	45	39	2	5.5	85.6	4.7
SCCATBALLYE	43	43	0	0.0	100.0	0.0
SPHETHCIBROS	108	100	4	4.1	92.3	3.8
SPHETHNIMBOS	40	40	0	0.0	100.0	0.0
STEPLOSSD3	26	26	0	0.0	100.0	0.0
SIMSON10	182	54	4	7.9	29.4	2.3
SIMSON15	136	51	12	23.5	37.4	8.8
SIMSON19	26	9	1	15.6	33.1	5.1
SICIANBBC3	250	84	7	8.6	33.7	2.9
SOFAC LA	108	31	3	9.1	28.3	2.6

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
(15 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF ACTIVE	STANDARD ERROR	PERCENT ACTIVE
SUPAC V	26	9	1	13.5	34.7	4.7	4.7
SWEIGERS 226	191	170	13	7.9	88.9	7.0	7.0
SWEIGERS 26	105	102	4	3.6	97.3	3.5	3.5
TCRAPT A	33	3	2	68.6	9.2	6.3	6.3
TCRAPTB C	1952	1030	105	10.2	52.8	5.4	5.4
TCRAPTE F	44	13	2	15.1	26.9	4.4	4.4
TCRAPTEL	236	102	25	24.6	43.1	10.6	10.6
TEMCO 11A	31	18	1	6.9	56.8	3.9	3.9
THUNDERBIRD	39	26	3	13.2	67.5	8.9	8.9
THFSONAVION	361	269	40	15.0	74.6	11.2	11.2
THYMEK	34	9	2	18.7	26.6	5.0	5.0
UNIVAC GC 1	705	478	65	13.5	67.8	9.2	9.2
UNIVAC 108	2268	1449	148	10.2	63.9	6.5	6.5
UNIVAC 415	2594	1673	156	9.3	64.5	6.0	6.0
UNIVAC 2150	136	126	4	3.4	92.9	3.1	3.1
VICKERS 745	17	13	4	26.9	77.3	20.8	20.8
WACC ASO	32	6	2	25.9	19.4	5.0	5.0
WACO GXE	36	11	2	19.1	30.1	5.7	5.7
WACO R	34	11	3	23.8	31.4	7.5	7.5
WACO U	28	5	1	17.9	16.3	2.9	2.9
WACC UP7	162	78	4	5.0	48.0	2.4	2.4

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1980 (16 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
WACCI	56	12	2	13.6	21.5	2.9
WAGNER65	368	129	37	28.8	35.1	10.1
WHEELY201	77	73	5	6.6	94.3	6.3
TOTAL	255761	211045	945	0.4	82.5	0.4

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (1 OF 8)

TYPE	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT						ILS RECEIVING EQUIPMENT					
	360 CB	120 CB	2+ SYS	HO CODE	4096 CODE	ALT ENC	HO TRANS	LOC	BEKA ENC	GLIDE SLOPE	HLS	HO ILS	BEKA ENC	GLIDE SLOPE	HLS	HO ILS		
FIXED WING																		
PISTON																		
1 BNG 1-3 STAYS	42412	11102	6870	31619	19678	1683	65384	14065	7163	4131	154	69691						
ESTIMATED POPULATION																		
1 STANDARD ERROR																		
ESTIMATED % OF TIP1	51.1	13.1	8.1	37.0	23.1	1.9	76.9	16.5	8.4	4.9	0.2	82.0						
1 BNG 4+ SEATS																		
ESTIMATED POPULATION	64104	58304	81251	3253	98859	40342	20205	85850	60715	67757	384	29443						
1 STANDARD ERROR																		
ESTIMATED % OF TIP1	53.0	49.0	68.2	2.7	83.0	33.9	17.0	72.1	67.8	56.9	0.3	24.7						
TOTAL 1 BNG																		
ESTIMATED POPULATION	107516	6947	68121	34672	118537	41986	65550	99916	87898	71889	498	99135						
1 STANDARD ERROR																		
ESTIMATED % OF TIP1	52.7	34.0	43.2	17.0	58.1	20.6	41.9	49.0	43.1	35.2	0.2	48.6						
2 BNG 1-6 SEATS																		
ESTIMATED POPULATION	7910	11346	15209	282	17763	14314	745	17703	17625	16915	110	745						
1 STANDARD ERROR																		
ESTIMATED % OF TIP1	42.7	61.2	82.1	1.5	96.0	77.3	4.0	95.5	94.0	91.3	0.6	4.0						
STANDARD ERROR																		
CODE																		
GREATER THAN OR EQUAL TO																		
0 X																		
10 X																		
20 X																		
30 X																		
40 X																		

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (2 OF 8)

TYPE	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT						ILS RECEIVING EQUIPMENT					
	360 CF	720 CB	2+ SIS	MO COMM	4096 CODE	ALT ENC	NO TURNS	LOC	ENR EIC	GLIDE SLOPE	MLS	NO ILS						
2 BIG 7+ SEATS ESTIMATED POPULATION	2724	6717	7618	513	9017	7432	683	9009	8801	8801	41	602						
1 STANDARD BIRCH ESTIMATED % OF TYPE	28.1	69.3	78.5	5.3	93.0	76.1	76.6	7.0	92.9	90.9	90.7	0.4	6.2	C				
TOTAL 2 BIG ESTIMATED POPULATION	10634	18064	22823	795	26801	21746	1426	26713	26242	25717	152	1346						
1 STANDARD BIRCH ESTIMATED % OF TYPE	37.7	64.0	80.8	2.8	94.9	77.0	5.1	94.6	93.0	91.1	0.5	4.8	B					
CYCLE PISTON ESTIMATED POPULATION	122	235	256	28	322	171	60	297	287	285	0	65						
1 STANDARD BIRCH ESTIMATED % CP TYPE	32.1	61.5	66.9	7.4	84.3	44.8	15.7	77.6	75.1	74.6	0.0	22.4	B					
TOTAL PISTON ESTIMATED POPULATION	116274	87707	111201	35496	145662	63904	27038	126926	114428	97891	650	100569						
1 STANDARD BIRCH ESTIMATED % CP TYPE	50.8	37.7	47.9	15.3	62.6	27.5	37.4	54.5	49.2	42.1	0.3	43.2	A	C				
1800000P 2 BIG 11-12 SEATS ESTIMATED POPULATION	474	2989	2803	41	3395	3340	44	3393	3391	3348	23	46						
1 STANDARD BIRCH ESTIMATED % OF TYPE	13.8	86.9	81.5	1.2	98.7	97.1	1.3	98.6	98.6	97.3	0.7	1.4	D					
2 BIG 13+ SEATS ESTIMATED POPULATION	111	579	592	5	652	508	30	674	674	674	12	6						
1 STANDARD BIRCH ESTIMATED % OF TYPE	16.4	84.8	86.7	0.8	95.6	86.2	4.4	96.8	96.8	96.8	1.6	1.2	B	D				
STANDARD ERROR																		
GREATER THAN OR EQUAL TO																		
0 %															A			
10 %															B			
20 %															C			
30 %															D			

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (3 OF 8)

TYPE	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT						ILS RECEIVING EQUIPMENT					
	360 CH	720 CH	2+ SYS	NO CONS	4096 CODE	NO EBC	4096 CODE	NO EBC	LOC	BEAM SEC	GLIDE SLOPE	LOC	BEAM SEC	GLIDE SLOPE	LOC	BEAM SEC	GLIDE SLOPE	
TOTAL 2 ENG																		
ESTIMATED POPULATION	566	3568	3395	46	4047	3929	75	4067	4066	4023	36	55						
% STANDARD ERROR	B	A	D	A	A	C	C	A	A	A	D	D						
ESTIMATED % CP TYPE	16.2	86.6	82.4	1.1	98.2	95.3	1.0	98.7	98.6	97.6	0.9	1.3						
OTHER TURBOPROP																		
ESTIMATED POPULATION	18	70	67	62	68	51	62	67	65	61	0	81						
% STANDARD ERROR	D	B	B	B	B	B	E	B	B	B	A	B						
ESTIMATED % OF TYPE	11.5	44.1	42.8	39.3	43.1	32.4	51.9	42.7	41.5	38.9	0.0	50.5						
TOTAL TURBOPROP																		
ESTIMATED POPULATION	604	3639	3463	109	4116	3580	157	4135	4132	4085	36	136						
% STANDARD ERROR	B	A	B	C	A	A	E	A	A	A	D	D						
ESTIMATED % OF TYPE	14.1	85.0	80.9	2.6	96.1	93.0	3.7	96.6	96.5	95.4	0.8	3.2						
TURBOJET																		
2 ENG																		
ESTIMATED POPULATION	171	2624	2423	3	2633	2596	43	2661	2656	2642	80	12						
% STANDARD ERROR	C	A	A	D	A	A	D	A	A	A	D	D						
ESTIMATED % OF TYPE	6.4	98.2	90.6	0.1	98.4	97.1	1.6	99.5	99.4	98.8	3.0	0.5						
OTHER																		
ESTIMATED POPULATION	222	416	446	90	607	400	110	592	588	543	39	111						
% STANDARD ERROR	C	B	B	B	A	A	E	A	A	A	A	A						
ESTIMATED % OF TYPE	30.6	57.4	61.8	12.5	83.7	55.1	15.2	81.6	81.1	74.9	5.5	15.4						
TOTAL	TURBOJET																	
ESTIMATED POPULATION	393	3041	2972	93	3237	2557	154	3254	3245	3186	119	124						
% STANDARD ERROR	B	A	A	B	A	A	E	A	A	A	D	D						
ESTIMATED % CP TYPE	11.6	89.5	84.5	2.8	95.2	88.2	8.5	95.7	95.5	93.7	3.5	3.7						

STANDARD ERROR		CCDI	
GREATER THAN	LESS THAN	OR EQUAL TO	—
—	—	—	—
0 %	10 %	20 %	4
10 %	20 %	30 %	B
20 %	30 %	30 %	C
30 %	30 %	30 %	D
—	—	—	E

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (4 OF 8)

TYPE	VHF COMMUNICATIONS				TRANSICDEFF EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CB	720 CB	2+ SIS	NO COMM	4096 CODE	ALT ENCL	IC TRANS	LOC	BEPS EFC	GLIDE SLOPE	MLS	NO ILS
TOTAL FIXED WING												
ESTIMATED POPULATION	115272	94388	117537	35699	153016	70882	87350	134316	121807	105163	807	10082 ^c
^a STANDARD EDITION	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^c	^a
^b ESTIMATED % OF TYPE	49.6	39.3	49.9	14.9	63.7	29.5	36.3	55.9	50.7	43.7	0.3	41.9
ROTORCRAFT												
PISTON	1940	912	196	2618	756	148	4699	127	27	28	4	5326
^a ESTIMATED POPULATION	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^d	^a
^b STANDARD EDITION	^b	^b	^b	^b	^b	^b	^b	^b	^b	^b	^d	^a
^c ESTIMATED % OF TYPE	35.3	16.6	3.6	47.6	13.8	2.7	85.4	2.3	0.5	0.4	0.1	46.8
WHEEL	948	2426	1157	141	2171	650	1327	1389	784	699	3	2102
^a ESTIMATED POPULATION	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^d	^a
^b STANDARD EDITION	^b	^b	^b	^b	^b	^b	^b	^b	^b	^b	^d	^a
^c ESTIMATED % OF TYPE	27.1	69.2	33.0	4.0	61.9	18.6	37.9	39.6	22.4	15.9	4.1	60.0
TOTAL ROTORCRAFT												
ESTIMATED POPULATION	2869	3339	1354	2760	2927	758	6027	1517	812	723	8	7428
^a STANDARD EDITION	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^d	^a
^b ESTIMATED % OF TYPE	32.1	37.1	15.0	30.6	32.5	8.0	66.9	16.8	9.0	8.0	0.1	42.5
OTHER												
ESTIMATED POPULATION	2628	420	66	3360	235	83	6133	10	6	3	1	6358
^a STANDARD EDITION	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^d	^a
^b ESTIMATED % OF TYPE	41.3	6.6	1.0	52.6	3.7	1.3	96.3	0.2	0.1	0.1	0.0	92.6
TOTAL AIRCRAFT												
ESTIMATED POPULATION	124769	98149	116958	41820	156179	71165	99511	135844	122626	105889	816	114617
^a STANDARD EDITION	^a	^a	^a	^a	^a	^a	^a	^a	^a	^a	^c	^a
^b ESTIMATED % OF POP	48.8	38.4	46.5	16.4	61.1	28.1	18.9	53.1	47.9	41.8	0.3	44.8

NOTE : COLUMNS SUMMATIONS MAY EXCEED EACH PRINTED TOTALS DUE TO ESTIMATION ERRORS.

STANDARD EDITION	CCDF
GRATUIT	LESS THAN
THAN	OR
EQUAL TO	
0 %	10 %
10 %	20 %
20 %	30 %
30 %	D

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (5 OF 8)

TYPE		NAVIGATION EQUIPMENT										
		POS 100CH	VOB 200CH	2+	ADP	DME	RNAV	LNAV	FLT DIR	RADAR	ALT CHPTS	WINGT NO WAVEQ
FIXED WING PISTON												
1	ENG 1-3 SEATS	33226	15754	7224	6972	1099	655	250	241	189	36317	
1	ESTIMATED POPULATION	4	4	4	4	4	4	4	4	4	4	
1	STANDARD ERROR	39.1	10.5	9.5	8.2	1.2	0.8	0.3	0.3	0.2	42.7	
1	ESTIMATED % OF TYPE											
1	ENG 4+ SEATS	46144	73267	67831	62885	38118	8252	505	3702	2690	483	
1	ESTIMATED POPULATION	4	4	4	4	4	4	4	4	4	4	
1	STANDARD ERROR	38.8	61.5	73.8	69.6	32.9	6.9	0.4	3.1	2.3	0.4	
1	ESTIMATED % OF TYPE										3.3	
TOTAL 1 ENG												
1	ESTIMATED POPULATION	79371	89021	95056	89857	39127	8908	763	3953	2932	672	
1	STANDARD ERROR	4	4	4	4	4	4	4	4	4	4	
1	ESTIMATED % OF TYPE	38.9	43.6	46.6	44.0	19.2	4.4	0.4	1.4	0.4	12.7	
2	ENG 4-6 SEATS	5307	13310	16781	17506	15389	5829	448	4595	3359	433	
2	ESTIMATED POPULATION	4	4	4	4	4	4	4	4	4	4	
2	STANDARD ERROR	28.6	71.8	90.6	94.5	93.1	31.5	2.4	24.9	16.1	1.6	
2	ESTIMATED % OF TYPE											
2	ENG 7+ SEATS	1957	7567	8426	8856	7874	3407	400	3616	2621	377	
2	ESTIMATED POPULATION	4	4	4	4	4	4	4	4	4	4	
2	STANDARD ERROR	20.2	78.0	86.9	91.3	81.2	35.1	4.1	37.3	27.0	3.9	
2	ESTIMATED % OF TYPE										3.3	
TOTAL 2 ENG												
2	ESTIMATED POPULATION	7265	20878	25207	26363	23263	9236	849	8211	5981	810	
2	STANDARD ERROR	4	4	4	4	4	4	4	4	4	4	
2	ESTIMATED % OF TYPE	25.7	74.0	89.3	93.4	82.4	32.7	3.0	29.1	21.2	2.2	
STANDARD ERROR												
ESTIMATED % OF TYPE												
CODE												
CLASS THAN OR EQUAL TO												
0 %												
10 %												
20 %												
30 %												
D												

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (6 OF 8)

TYPE	NAVIGATION EQUIPMENT										
	VOR 160CH	VOR 200CH	2° ACIR	ADF	DME	IRAV	LORAV	PLT DIR	RADAR ALT	INSTR COMPTS	NO NAV_EQ
CHESS PILOTS											
ESTIMATED POPULATION	99	247	271	293	216	26	5	17	21	3	37
% STANDARD ERROR	B	A	A	A	A	D	D	D	D	D	C
ESTIMATED % OF TYPE	26.0	64.5	70.9	76.6	56.4	6.8	1.3	4.6	5.5	0.8	9.8
TOTAL PILOTS											
ESTIMATED POPULATION	66735	110146	120535	116516	62607	16171	1617	12182	6934	1485	40857
% STANDARD ERROR	A	A	A	A	A	A	B	A	A	B	A
ESTIMATED % CP TYPE	37.3	47.3	51.8	50.1	26.9	7.8	0.7	5.2	3.8	0.6	17.6
TOTAL CPPIOP											
2 ENG 1-12 SEATS											
ESTIMATED POPULATION	515	2990	3343	3364	3368	2513	315	2874	2898	239	44
% STANDARD ERROR	B	A	A	A	A	A	C	A	C	D	
ESTIMATED % CP TYPE	15.0	64.0	97.2	97.8	97.9	73.1	9.2	83.6	82.8	7.0	1.3
2 ENG 13+ SEATS											
ESTIMATED POPULATION	93	590	672	668	617	139	58	279	277	26	6
% STANDARD ERROR	C	A	A	A	A	C	D	A	E	D	
ESTIMATED % CP TYPE	13.7	66.5	98.4	97.3	90.4	20.4	8.1	40.9	40.6	3.8	1.0
TOTAL 2 ENG											
ESTIMATED POPULATION	609	3481	4015	4028	3986	2652	370	3154	3126	266	50
% STANDARD ERROR	E	A	A	A	A	A	B	A	C	D	
ESTIMATED % CP TYPE	14.6	64.4	97.4	97.7	96.7	64.3	9.0	76.5	75.8	6.5	1.2
CHESS TURBOPIOP											
ESTIMATED POPULATION	20	57	47	71	63	5	31	47	47	0	72
% STANDARD ERROR	D	E	B	B	B	D	C	C	C	A	B
ESTIMATED % OF TYPE	13.1	36.1	30.2	44.9	40.2	3.2	20.0	29.7	29.8	0.6	45.7

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %	D	D

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (7 OF 8)

TYPE	NAVIGATION EQUIPMENT										NO NAV_EQ
	103 100CH	VOR 200CH	2+ RCVR	ADF	DME	MEAS	LORAN	FLT DIR	RADAR	FLT ALT	
TOTAL TURBOPROP											
ESTIMATED POPULATION	630	3530	4063	4100	8049	2657	402	3201	3173	266	123
1 STANDARD PILOT	6	3	4	4	1	1	2	1	1	1	C
ESTIMATED % CP TYPE	14.7	82.6	94.9	95.6	94.6	62.1	9.4	74.8	74.1	6.2	2.9
TURBOJET											
2 BPC	182	2541	2598	2602	2644	1063	1281	2619	2420	371	3
ESTIMATED POPULATION	C	4	4	4	1	1	1	1	1	2	D
1 STANDARD PILOT	6.8	95.0	97.0	97.3	98.9	39.0	47.9	98.0	90.5	14.0	0.1
ESTIMATED % OF TYPE											
OTHER											
ESTIMATED POPULATION	186	426	546	561	579	105	348	516	436	85	A4
1 STANDARD PILOT	C	1	1	1	1	1	1	1	1	1	B
ESTIMATED % CP TYPE	25.7	59.1	75.3	74.6	79.0	14.5	48.0	71.1	60.1	11.8	11.6
TOTAL TURBOJET											
ESTIMATED POPULATION	369	2970	3141	3144	3223	1168	1630	3135	2857	453	87
1 STANDARD PILOT	10.9	87.4	92.4	92.5	94.8	34.4	48.0	92.2	84.0	13.5	B
ESTIMATED % CP TYPE											2.6
TOTAL PILOT WING											
ESTIMATED POPULATION	87735	116656	127740	123758	69880	21997	3650	18519	16966	2210	41067
1 STANDARD PILOT	A	4	4	4	4	4	1	4	4	1	A
ESTIMATED % OF TYPE	36.5	48.5	53.1	51.5	29.1	9.2	1.5	7.7	6.2	0.9	17.1
ICERCRAFT											
PISTON											
ESTIMATED POPULATION	333	161	21	343	18	8	7	13	8	4	4755
1 STANDARD PILOT	B	C	D	C	D	E	F	D	C	D	A
ESTIMATED % OF TYPE	6.1	2.9	0.4	6.3	0.3	0.2	0.1	0.2	0.2	0.1	86.4
STANDARD ERROR											
GREATER THAN OR EQUAL TO	0 %	10 %	20 %	30 %	40 %	A	B	C	D	E	
	10 %	20 %	30 %	40 %	50 %						
	20 %	30 %	40 %	50 %	60 %						
	30 %	40 %	50 %	60 %	70 %						

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1980 (8 OF 8)

TYPE	NAVIGATION EQUIPMENT								FLIGHT COMPT	NO WAVEQ
	1600CB	VOR 200CB	2+	ADF	DME	RNAV	PLT DIS	BADAR ALT		
TOTAL										
ESTIMATED POPULATION	168	1658	645	2145	895	545	176	250	430	64
ESTIMATED ERROR	C	A	B	A	B	C	C	C	E	D
ESTIMATED % OF TYPE	16.8	47.3	16.4	61.2	25.5	15.6	5.0	7.1	12.3	1.8
TOTAL MOTORCRAFT										
ESTIMATED POPULATION	921	1820	667	2489	913	559	183	263	439	69
ESTIMATED ERROR	B	A	B	A	B	C	D	C	E	A
ESTIMATED % OF TYPE	10.2	20.2	7.4	27.6	10.1	6.2	2.0	2.9	4.9	0.8
OTHER										
ESTIMATED POPULATION	116	12	6	7	5	1	1	3	1	2
ESTIMATED ERROR	D	E	D	D	D	E	E	D	E	A
ESTIMATED % OF TYPE	1.8	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	58.0
ICAO AIRCRAFT										
ESTIMATED POPULATION	68773	118486	128414	126255	70800	22553	3836	18796	15406	2263
ESTIMATED ERROR	A	A	A	A	A	A	A	A	A	A
ESTIMATED % OF POP	34.7	46.3	50.2	49.4	27.7	8.8	1.5	7.3	6.0	0.9

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR	CODE
GREATER THAN	
LESS THAN OR EQUAL TO	
0 %	10 %
10 %	20 %
20 %	30 %
30 %	D

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(1 OF 17)

STATE	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT				TLS RECEIVING EQUIPMENT																																																																																																																																														
	360 CE	720 CH	2+ SRS	NO COMB	4096 CODE	ALT BNC	NO TRANS	LOC	SKY BEC	GLIDE SLOPE	MLS	NO TLS																																																																																																																																													
ALABAMA																																																																																																																																																									
ESTIMATED POPULATION	1219	927	1229	622	1481	718	1231	1319	1157	1061	0	1360																																																																																																																																													
1 STANDARD BFRCH	P	C	P	C	C	C	B	B	B	B	A	B																																																																																																																																													
ESTIMATED % OF STATE	44.0	33.5	44.4	22.5	53.5	25.9	44.4	47.6	41.6	38.3	0.0	50.1																																																																																																																																													
ALASKA																																																																																																																																																									
ESTIMATED POPULATION	1173	1801	1438	624	1548	282	5997	1947	1235	917	2	5525																																																																																																																																													
1 STANDARD BFRCH	P	P	P	C	C	D	A	B	B	B	D	A																																																																																																																																													
ESTIMATED % OF STATE	69.7	24.3	19.4	8.4	20.9	3.6	80.6	26.2	16.6	12.4	0.0	74.4																																																																																																																																													
ARIZONA																																																																																																																																																									
ESTIMATED POPULATION	2788	2566	2406	916	3960	1759	2180	2795	2638	2307	9	3267																																																																																																																																													
1 STANDARD BFRCH	P	P	P	B	B	B	B	B	B	B	D	B																																																																																																																																													
ESTIMATED % OF STATE	45.9	42.5	39.6	15.1	65.1	28.9	35.9	46.0	43.4	37.9	0.2	53.7																																																																																																																																													
ARKANSAS																																																																																																																																																									
ESTIMATED POPULATION	1142	947	1269	979	1480	742	1575	1237	1219	1068	0	1771																																																																																																																																													
1 STANDARD BFRCH	C	P	P	B	B	C	B	B	B	B	A	B																																																																																																																																													
ESTIMATED % OF STATE	37.8	31.4	42.0	32.5	49.1	24.6	52.2	41.0	40.4	35.8	0.0	58.7																																																																																																																																													
CALIFORNIA																																																																																																																																																									
ESTIMATED POPULATION	17197	14587	17670	9869	23665	11917	12035	20998	19021	16326	210	14054																																																																																																																																													
1 STANDARD BFRCH	A	A	A	A	A	A	A	A	A	A	D	A																																																																																																																																													
ESTIMATED % OF STATE	49.1	41.6	50.4	13.9	67.5	34.0	34.3	59.9	54.3	46.6	0.6	40.1																																																																																																																																													
<table border="1"> <tr> <td>CODE</td> </tr> <tr> <td>STANDARD BFRCH</td> </tr> <tr> <td>GREATER THAN</td> </tr> <tr> <td>LESS THAN</td> </tr> <tr> <td>OR</td> </tr> <tr> <td>EQUAL TO</td> </tr> <tr> <td>0 %</td> </tr> <tr> <td>10 %</td> </tr> <tr> <td>20 %</td> </tr> <tr> <td>30 %</td> </tr> </table>	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	STANDARD BFRCH	GREATER THAN	LESS THAN	OR	EQUAL TO	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	20 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %																																																																														
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GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN	GREATER THAN																																																																																																																																												
LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN	LESS THAN																																																																																																																																												
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TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(2 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT				
	360 CP	720 CH	2+ SYS	NC COMM	4956 COMM	4956 BNC	ALT BNC	NC TRANS	LOC	PKER BPC	GLIDE SLC	MLS	NO TLS
COLORADO													
ESTIMATED POPULATION	2515	2121	2474	881	3289	1367	2191	2570	2412	2032	0	2655	
% STANDARD PKER	B 46.2	B 38.5	B 45.4	C 16.2	B 61.3	B 25.1	E 49.2	E 47.1	E 44.6	B 37.3	A 0.0	E 43.7	
ESTIMATED % CP STATE													
CONNECTICUT													
ESTIMATED POPULATION	868	594	946	467	1021	570	865	405	805	724	0	52	
% STANDARD PKER	C 46.8	C 32.1	C 51.0	D 25.2	C 55.1	C 30.7	C 46.7	C 48.8	C 43.6	C 35.1	D 0.5	C 51.3	
ESTIMATED % CP STATE													
DELAWARE													
ESTIMATED POPULATION	250	270	270	137	435	103	212	431	415	407	0	211	
% STANDARD PKER	E 39.8	E 43.1	E 42.7	D 21.8	D 69.2	D 10.7	D 33.8	D 68.6	D 66.0	D 64.7	A 0.0	E 33.7	
ESTIMATED % CP STATE													
DC													
ESTIMATED POPULATION	10	54	62	7	65	54	7	56	56	56	0	16	
% STANDARD PKER	E 14.9	E 74.3	E 35.8	D 9.7	D 89.2	D 74.3	D 9.7	D 77.9	D 77.9	D 77.9	A 0.0	E 21.5	
ESTIMATED % CP STATE													
FLORIDA													
ESTIMATED POPULATION	5483	6385	7234	1916	8631	5369	4312	3020	7055	6605	116	4805	
% STANDARD PKER	A 47.5	A 47.7	A 53.8	B 13.6	A 60.5	A 40.1	A 32.2	A 55.9	A 52.7	A 49.3	D 0.0	A 35.9	
ESTIMATED % CP STATE													
GEORGIA													
ESTIMATED POPULATION	2696	1615	2293	792	2923	898	2203	2529	2264	1684	5	2474	
% STANDARD PKER	B 57.3	E 33.1	E 45.5	C 15.7	B 57.9	B 17.6	B 43.7	B 50.0	B 49.8	B 38.5	D 0.1	B 48.5	
ESTIMATED % CP STATE													
HAWAII													
ESTIMATED POPULATION	284	170	236	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700	2360	23	376	45	72	272	172	171	0	180	
% STANDARD PKER	D 69.6	E 36.5	E 51.5	D 5.3	D 81.4	D 5.8	D 16.5	D 58.1	D 56.9	D 36.7	A 0.0	E 38.5	
ESTIMATED % CP STATE													
ILLINOIS													
ESTIMATED POPULATION	2800	1700</td											

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(3 of 17) VHF COMMUNICATIONS

STATE	TRANSECDUES EQUIPMENT										ILS RECEIVING EQUIPMENT			
	36) CH	72) CH	2+ SYS	NC CCEN	WJ36 CODE	ALT ENC	HC TRANS	LOC	PIPER EPC	GLIDE SLOPE	MLS	NO ILS		
ILLINOIS														
ESTIMATED POPULATION	1353	614	765	519	1127	186	1336	1144	919	791	J	1252		
4 STANDARD PILOTS	B	C	C	C	B	D	C	C	C	C	A	F		
ESTIMATED % OF STATE	53.7	23.8	25.7	20.2	43.7	15.1	51.9	44.4	36.5	30.7	J	50.1		
INDIANA														
ESTIMATED POPULATION	5440	4117	5059	1696	6514	2755	4192	6224	5482	4282	2	4616		
4 STANDARD PILOTS	A	B	A	B	A	B	A	A	A	A	D	B		
ESTIMATED % OF STATE	51.6	39.0	51.7	16.1	61.7	26.1	39.7	56.0	51.9	40.5	J	41.1		
KANSAS														
ESTIMATED POPULATION	2626	1518	2245	349	3055	1482	1893	2592	2355	1560	J	2107		
4 STANDARD PILOTS	B	E	E	C	C	B	B	B	B	B	A	B		
ESTIMATED % OF STATE	54.0	31.2	46.2	17.5	62.9	30.4	37.2	53.3	48.4	40.7	J	43.3		
KENTUCKY														
ESTIMATED POPULATION	2354	1572	2163	312	2871	1263	1810	2311	2157	1621	J	2242		
4 STANDARD PILOTS	E	E	E	C	C	B	B	B	B	B	D	B		
ESTIMATED % OF STATE	59.7	34.2	44.8	19.8	62.4	27.6	39.8	50.9	46.9	35.2	J	48.7		
LOUISIANA														
ESTIMATED POPULATION	1918	2184	2152	323	2959	1197	1852	2315	2157	1644	J	2343		
4 STANDARD PILOTS	B	E	E	C	C	B	B	B	B	B	A	B		
ESTIMATED % OF STATE	45.6	45.6	44.9	17.2	61.7	24.8	38.7	48.1	45.1	38.6	J	45.7		
MISSOURI														
ESTIMATED POPULATION	973	724	1227	321	1271	411	715	1073	1062	905	1	F52		
4 STANDARD PILOTS	C	C	C	D	B	D	C	C	C	C	C	C		
ESTIMATED % OF STATE	49.2	36.6	46.9	16.3	64.6	20.8	36.1	54.2	53.7	45.9	J	43.1		
MISSISSIPPI														
ESTIMATED POPULATION	1478	1760	1659	1068	2217	941	1414	1451	1547	1305	35	2251		
4 STANDARD PILOTS	B	E	E	B	B	C	B	B	B	B	D	E		
ESTIMATED % OF STATE	26.5	43.5	45.9	26.4	54.8	23.3	47.3	45.8	38.3	32.3	J	55.7		
* STANDARD ERROR * CODE *														
* GREATER THAN OR EQUAL TO * * * * *														
* 0 % 10 % 20 % 30 % 40 % * * * * *														
* 10 % 20 % 30 % 40 % 50 % * * * * *														

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(5 OF 17)

STATE	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT						ILS RECEIVING EQUIPMENT					
	360 CE	720 CH	2* SIS	NC COIN	4996 CODE	ALT ENC	NO TRANS	LOC	MKB BEC	GLIDE SLOPE	MLS	NO ILS	ILS					
NEVADA	360 CE	720 CH	2* SIS	NC COIN	4996 CODE	ALT ENC	NO TRANS	LOC	MKB BEC	GLIDE SLOPE	MLS	NO ILS	ILS					
ESTIMATED POPULATION	1461	825	370	467	1499	416	1124	926	885	736	1	1601	B					
* STANDARD ERROR	B	C	D	B	D	D	E	C	C	C	4	0	0					
ESTIMATED % OF STATE	55.2	31.2	36.7	17.6	56.6	15.7	42.5	35.0	33.4	27.9	0.0	60.5						
NEBRASKA	969	656	857	585	1177	422	959	1019	825	758	0	1125	E					
ESTIMATED POPULATION	C	C	C	C	C	C	D	C	C	C	4	51.7						
* STANDARD ERROR	C	C	C	C	C	C	D	C	C	C	4	51.7						
ESTIMATED % OF STATE	46.5	30.2	39.4	26.9	54.1	19.4	46.0	46.4	37.9	36.7	0.0	42.3						
NEVADA	1300	1152	1185	277	1817	738	594	1311	1335	1211	0	1034						
ESTIMATED POPULATION	B	C	B	D	B	C	C	B	B	B	4	42.3						
* STANDARD ERROR	B	C	B	D	B	C	C	B	B	B	4	42.3						
ESTIMATED % OF STATE	53.2	43.1	48.5	11.3	74.4	39.2	24.3	53.6	54.0	49.5	0.0	42.3						
NEW HAMPSHIRE	575	601	716	248	355	299	526	629	569	486	0	750	C					
ESTIMATED POPULATION	C	C	C	D	C	D	C	C	C	C	4	54.0						
* STANDARD ERROR	C	C	C	D	C	D	C	C	C	C	4	54.0						
ESTIMATED % OF STATE	41.4	43.3	51.6	17.9	61.6	21.6	38.0	45.3	41.0	35.0	0.0	54.0						
NEW JERSEY	2529	1709	2539	700	3058	1971	1649	2956	2584	2284	46	1697						
ESTIMATED POPULATION	B	E	E	C	B	B	B	B	B	B	D	43.2						
* STANDARD ERROR	B	E	E	C	B	B	B	B	B	B	D	43.2						
ESTIMATED % OF STATE	43.5	36.2	53.8	14.8	64.7	41.7	34.6	62.6	54.7	48.4	1.0	35.5						
NEW MEXICO	1018	1203	1131	279	1487	763	811	1168	1131	667	0	510						
ESTIMATED POPULATION	B	E	E	C	B	C	B	B	B	B	C							
* STANDARD ERROR	B	E	E	C	B	C	B	B	B	B	C							
ESTIMATED % OF STATE	46.1	52.1	51.6	12.1	64.4	32.9	35.1	50.6	49.2	37.6	0.0	43.2						
NEW YORK	4156	2051	3220	1300	4092	2069	3594	4162	3699	3242	0	3475						
ESTIMATED POPULATION	B	E	E	B	B	B	B	B	B	B	A							
* STANDARD ERROR	B	E	E	B	B	B	B	B	B	B	A							
ESTIMATED % OF STATE	54.6	31.9	41.9	16.9	53.2	27.3	46.6	58.2	48.1	42.2	0.0	45.2						

STANDARD ERROR		CODE	
GREATER THAN OR EQUAL TO		LESS THAN	
0	1	10	1
10	1	20	1
20	1	30	1
30	1	40	1

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(6 OF 17)

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(7 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CT	720 CH	2+ SYS	NC COMM	4096 CODE	ALT REC	NO TRANS	LOC	2K28 BEC	GLIDE SLOPE	MLS	NO ILS
SCOTT CAROLINA												
ESTIMATED POPULATION	989	1021	1220	283	1501	604	703	1393	1020	1040	17	811
1 STANDARD ERROR	C	C	D	C	C	C	C	B	C	C	D	C
ESTIMATED % OF STATE	44.5	46.0	55.0	12.8	67.6	27.2	31.7	62.7	45.9	46.9	0.8	36.5
SCOTTI DAHLIA												
ESTIMATED POPULATION	731	451	586	338	742	124	733	696	628	552	0	775
1 STANDARD ERROR	C	E	C	D	C	D	C	C	C	D	4	C
ESTIMATED % OF STATE	49.2	29.8	33.6	22.3	48.9	8.2	48.3	45.9	41.4	36.4	0.0	51.4
MISSISSIPPI												
ESTIMATED POPULATION	1409	1555	1487	401	2399	1105	862	2080	1872	1710	0	1176
1 STANDARD ERROR	E	E	E	C	B	B	C	B	B	B	4	E
ESTIMATED % OF STATE	43.5	48.2	59.3	12.4	74.1	34.1	26.6	64.3	57.8	52.8	0.0	36.3
TEXAS												
ESTIMATED POPULATION	8836	9572	9930	3697	13455	6853	7783	11604	10721	9841	114	9320
1 STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF STATE	11.6	45.1	46.8	17.4	63.3	32.3	36.6	54.6	50.5	46.3	9.5	43.5
OKLAHOMA												
ESTIMATED POPULATION	906	676	871	115	1157	424	468	685	682	519	53	904
1 STANDARD ERROR	C	C	C	D	B	C	C	C	C	C	D	C
ESTIMATED % OF STATE	56.4	42.0	54.2	7.2	71.9	26.4	29.1	42.6	42.5	32.3	3.3	56.3
VERMONT												
ESTIMATED POPULATION	314	162	215	93	280	151	263	261	227	208	0	276
1 STANDARD ERROR	D	D	E	D	D	E	E	D	D	D	4	D
ESTIMATED % OF STATE	58.6	30.3	40.2	17.4	52.4	28.3	49.2	48.7	42.4	38.9	0.0	51.5
VIRGINIA												
ESTIMATED POPULATION	1674	1378	2040	551	2472	559	1088	2213	1902	1643	9	1246
1 STANDARD ERROR	B	E	E	C	B	C	E	B	E	B	4	E
ESTIMATED % OF STATE	53.0	36.9	57.7	15.6	69.9	27.1	30.8	62.6	53.8	46.5	0.0	35.3

* STANDARD ERROR
 ** CODE
 *** GREATER THAN OR EQUAL TO
 **** LESS THAN OR EQUAL TO
 ***** STANDARD ERROR
 ***** CODE

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(8 OF 17)

STATE	VHF COMMUNICATIONS						TRANSCEIVER EQUIPMENT						MLS RECEIVING EQUIPMENT					
	360 CB	720 CB	2+ SYS	NO CONN	4096 CODE	4LT ENC	50 TRANS	LOC	MMR BBC	GLIDE SLOPE	MIS NO	MLS ILS						
WASHINGTON ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	4629	2608	3343	1329	4383	1314	3687	3614	3380	2746	0	4057						
	A 57.6	30.0	B 41.6	C 16.5	D 54.5	E 16.4	F 45.7	G 47.4	H 42.1	I 34.1	J 0.0	K A	L A	M A	N A	O 50.5		
WEST VIRGINIA ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	670	500	716	102	837	338	420	887	790	592	3	366						
	C 50.7	D 37.8	E 55.7	F 7.7	G 63.4	H 25.6	I 31.8	J 67.1	K 59.8	L 44.6	M 0.3	N D	O D	P D	Q D	R 27.7		
WISCONSIN ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	2513	1911	2215	1118	3225	1245	2166	2862	2365	1858	77	2419						
	B 47.5	C 36.1	D 41.9	E 21.1	F 63.3	G 23.5	H 40.9	I 54.1	J 44.7	K 35.1	L 1.5	M 45.7	N D	O D	P D	Q 2		
WYOMING ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	522	575	524	243	803	466	512	597	550	522	0	677						
	C 40.2	D 44.3	E 40.3	F 18.7	G 61.7	H 35.9	I 39.4	J 45.9	K 45.4	L 40.2	M 0.0	N A	O C	P A	Q C	R 52.0		
Puerto Rico ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	150	91	113	9	150	31	58	147	115	118	2	101						
	D 59.7	E 36.2	F 46.9	G 3.6	H 54.6	I 12.6	J 39.2	K 58.5	L 45.9	M 47.0	N 0.9	O 40.3	P D	Q D	R D	S D		
CIAWU U.S. TERRITORIES ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	41	42	43	5	60	13	26	45	36	36	0	43						
	E 39.2	F 40.7	G 41.6	H 5.2	I 57.3	J 13.4	K 27.2	L 43.1	M 34.4	N 34.4	O 0.0	P 42.0	Q A	R A	S D	T D		
ICELAND ESTIMATED POPULATION # STANDBY FREQ ESTIMATED # OF STATE	201	556	516	20	630	423	139	604	542	535	10	162						
	D 24.9	E 60.9	F 64.0	G 2.6	H 78.1	I 52.4	J 17.3	K 74.9	L 67.2	M 66.4	N 1.2	O 20.1	P C	Q D	R D	S D		
* STANDARD ERROR CODE																		
* GREATER THAN OR EQUAL TO																		
* 10 %																		
* 10 %																		
* 20 %																		
* 30 %																		
* 40 %																		

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(9 OF 17)

STATE	VHF COMMUNICATIONS			TRANSPONDER EQUIPMENT			IHS RECEIVING EQUIPMENT					
	360 CF	720 CH	2+ SRS	NO CASH	4096 CODE	ALT ENC	NO TRANS	LOC	BMR ENC	GLIDE SLOPE	NLS	NO ILS
TOTAL												
ESTIMATED EQUIPMENT	124789	58149	118958	41820	156179	71765	99511	135844	122626	105889	816	114617
STANDARD ERROR	4	4	4	4	4	4	4	4	4	4	4	4
ESTIMATED % CP FOP	48.8	38.4	46.5	16.4	61.1	28.1	38.9	52.1	47.9	41.4	0.3	44.0

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(10 OF 17)

STATE	NAVIGATION EQUIPMENT						RADAR ALRT	FLIGHT COMPTS	NO RAVEQ
	POS 160CH	VOR 200CH	2+ ACVIA	ADP	DME	BEAV			
IDAHO	726	1216	1259	1201	682	261	22	161	109
	C	E	B	D	C	D	D	E	E
	26.2	43.9	45.4	43.3	26.6	10.2	0.8	5.8	3.9
ALASKA	3598	2249	1436	3564	583	52	21	33	102
	A	B	B	A	C	E	D	E	D
	46.5	30.3	19.4	48.0	7.9	0.7	0.3	0.5	1.4
ARIZONA	2145	2917	2882	3051	1473	403	29	360	3116
	B	E	B	B	B	E	E	E	E
	35.3	46.0	47.4	53.2	26.2	6.6	0.5	5.0	5.2
ARKANSAS	841	1193	1398	1217	795	266	33	207	139
	C	E	B	B	C	E	E	E	E
	27.9	39.5	46.3	40.3	26.4	8.8	1.1	6.9	4.6
CALIFORNIA	12333	17378	18891	16679	9767	2662	345	2473	1682
	A	A	A	A	A	E	C	E	E
	35.2	49.6	53.9	47.6	27.9	7.6	1.0	7.1	4.6
COLORADO	2073	2482	2745	2496	1448	262	20	332	191
	B	E	B	B	B	E	E	E	E
	36.0	45.5	50.3	45.8	26.5	4.0	0.4	6.1	3.5

STANDARD ERROR	CODE
GREATER THAN OR EQUAL TO	-----
0.1	10 %
10 %	20 %
20 %	30 %
30 %	-----

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980

STATE	NAVIGATION EQUIPMENT										NO NAVEQ
	105 10UCH	VOH 20UCH	2+ RCVR	ADP	DME	RNAV	FLT DIR	RADAR	FLT/HOT ALT	COMP/R	
CONNECTICUT											555
ESTIMATED POPULATION	655	707	925	77	503	134	79	71	7	7	C
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	C
ESTIMATED % OF STATE	37.5	36.1	41.1	41.5	27.4	7.2	0.7	0.2	0.2	0.2	33.0
DELAWARE											
ESTIMATED POPULATION	157	310	409	336	261	125	12	71	51	17	153
% STANDARD ERROR	D	E	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	31.4	47.6	64.1	53.5	41.4	20.0	2.1	12.2	8.2	2.6	24.3
FLORIDA											
ESTIMATED POPULATION	8	47	54	56	21	21	3	15	15	1	16
% STANDARD ERROR	E	C	D	D	D	D	D	D	D	D	B
ESTIMATED % OF STATE	12.1	65.0	74.3	77.9	33.0	27.4	4.5	25.7	20.5	1.8	21.5
GEORGIA											
ESTIMATED POPULATION	4234	7164	7396	7643	4242	1112	316	1012	555	166	2312
% STANDARD ERROR	B	A	A	A	A	B	D	B	D	D	B
ESTIMATED % OF STATE	31.6	53.6	55.2	57.1	31.7	7.6	2.4	8.2	7.1	1.2	15.6
HAWAII											
ESTIMATED POPULATION	2111	2069	2553	2265	1143	317	21	21	250	2	1114
% STANDARD ERROR	B	E	B	B	B	C	C	C	C	C	B
ESTIMATED % OF STATE	41.8	41.3	50.6	44.8	22.6	6.3	0.4	5.8	4.5	1.3	12.3
ILLINOIS											
ESTIMATED POPULATION	167	206	211	194	77	12	7	25	14	3	81
% STANDARD ERROR	D	D	D	D	D	E	E	E	E	E	D
ESTIMATED % OF STATE	35.8	44.2	46.9	33.4	16.5	2.7	1.5	5.5	3.0	0.7	17.3
ILLINOIS											
ESTIMATED POPULATION	1915	868	1037	1087	490	96	3	74	11	3	580
% STANDARD ERROR	C	C	C	C	C	E	E	E	E	E	C
ESTIMATED % OF STATE	39.4	33.7	41.2	42.2	13.1	1.8	0.4	2.7	4.0	0.4	22.5
ILLINOIS											
ESTIMATED POPULATION	1915	868	1037	1087	490	96	3	74	11	3	580
% STANDARD ERROR	C	C	C	C	C	E	E	E	E	E	C
ESTIMATED % OF STATE	39.4	33.7	41.2	42.2	13.1	1.8	0.4	2.7	4.0	0.4	22.5

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(12 OF 17)

STATE	NAVIGATION EQUIPMENT									
	VOH 100CH	VOH 200CH	ACVH	ADF	CME	BNAV	FLT DIR	SPS	FLMTG CCPDS	WJ NAVFC
ILLINOIS										
ESTIMATED EQUIPMENT	3815	4886	5961	5116	2888	1110	136	737	552	169
* STABILIZED EQUIP	^B 46.2	^A 46.3	^A 56.4	^A 45.4	^B 27.3	^B 10.5	^D 1.3	^B 7.1	^C 5.6	^B 1.6
ESTIMATED % OF STATE	36.2	46.2	46.4	45.4	31.6	11.0	9.5	6.2	5.6	22.6
INDIANA										
ESTIMATED EQUIPMENT	1734	2261	2315	2442	1535	515	24	336	206	72
* STABILIZED EQUIP	^E 35.7	^E 46.5	^E 42.3	^E 52.2	^B 31.6	^C 11.0	^D 9.5	^C 6.2	^D 6.1	^B 1.6
ESTIMATED % OF STATE	35.7	46.5	42.3	52.2	31.6	11.0	9.5	6.2	5.6	18.4
ICELAND										
ESTIMATED EQUIPMENT	158	2202	2234	2320	2104	314	22	254	216	7
* STABILIZED EQUIP	^E 34.4	^E 47.9	^E 41.6	^E 41.6	^B 31.4	^B 16.4	^D 9.5	^D 5.6	^D 4.5	^B 1.2
ESTIMATED % OF STATE	34.4	47.9	41.6	41.6	31.4	16.4	9.5	5.6	4.5	22.5
KANSAS										
ESTIMATED EQUIPMENT	1413	2213	2261	2264	1934	314	21	444	295	35
* STABILIZED EQUIP	^E 21.5	^E 43.3	^E 47.3	^E 47.3	^B 26.4	^B 16.4	^D 9.5	^D 6.2	^E 6.1	^B 1.7
ESTIMATED % OF STATE	21.5	43.3	47.3	47.3	26.4	16.4	9.5	6.2	5.6	23.1
KENTUCKY										
ESTIMATED EQUIPMENT	656	1016	1039	1034	527	123	21	101	66	5
* STABILIZED EQUIP	^C 23.2	^C 51.5	^C 55.1	^C 55.1	^C 26.7	^C 6.3	^D 1.5	^D 1.5	^C 5.1	^C 1.3
ESTIMATED % OF STATE	23.2	51.5	55.1	55.1	26.7	6.3	1.5	1.5	5.1	18.2
LOUISIANA										
ESTIMATED EQUIPMENT	1219	1610	1691	2005	1079	406	61	143	132	1
* STABILIZED EQUIP	^C 39.1	^C 35.8	^C 42.0	^C 49.6	^B 26.7	^B 10.1	^D 1.5	^D 1.5	^E 3.2	^B 1.2
ESTIMATED % OF STATE	39.1	35.8	42.0	49.6	26.7	10.1	1.5	1.5	3.2	25.9
MINNESOTA										
ESTIMATED EQUIPMENT	615	559	651	575	172	41	7	21	19	6
* STABILIZED EQUIP	^C 35.5	^C 36.0	^C 41.9	^C 37.2	^B 11.1	^B 2.7	^E 1.5	^C 1.4	^D 1.2	^D 1.4
ESTIMATED % OF STATE	35.5	36.0	41.9	37.2	11.1	2.7	1.5	1.4	1.2	19.3

*	STANDARD ERROR	CCDE	*
• GREATER THAN	• LESS THAN	•	•
• OR	• OR	•	•
• EQUAL TO	• EQUAL TO	•	•
• 0 %	• 10 %	• 10 %	• 10 %
• 10 %	• 20 %	• 20 %	• 20 %
• 20 %	• 30 %	• 30 %	• 30 %
• 30 %	• 40 %	• 40 %	• 40 %

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(13 OF 17)

STATE	NAVIGATION EQUIPMENT										NO WAVEQ
	VO5 100CH	VO5 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR	FLYING ALT	
MARYLAND											
ESTIMATED POPULATION	1241	1451	1645	1626	836	136	55	76	11	421	
✓ STANDARD BFRS	B	B	B	B	C	C	D	E	C	C	
ESTIMATE % OF STATE	39.0	45.6	51.7	51.1	26.3	4.3	1.7	3.9	2.4	0.4	13.3
MASSACHUSETTS											
ESTIMATED POPULATION	1701	1337	1693	1732	719	228	33	163	255	7	466
✓ STANDARD BFRS	B	E	B	B	C	C	D	D	E	E	C
ESTIMATE % OF STATE	50.1	35.4	41.9	51.2	21.2	6.7	1.2	4.7	7.5	0.2	14.3
PENNSYLVANIA											
ESTIMATED POPULATION	3256	4144	4249	3177	2141	644	92	481	496	30	156
✓ STANDARD BFRS	B	E	B	B	B	C	D	C	C	E	E
ESTIMATE % OF STATE	37.1	47.2	49.4	45.3	24.4	7.3	1.3	5.5	5.7	0.3	18.2
PENNSYLVANIA											
ESTIMATED POPULATION	2467	1975	2306	2292	1372	323	10	233	170	52	1746
✓ STANDARD BFRS	E	E	B	B	B	C	D	D	E	E	B
ESTIMATE % OF STATE	35.8	31.6	17.2	37.0	17.3	5.2	1.6	3.7	2.7	0.8	26.2
MISSISSIPPI											
ESTIMATED POPULATION	846	973	1166	1071	613	314	49	133	166	46	766
✓ STANDARD BFRS	C	C	B	C	C	C	D	D	E	E	C
ESTIMATE % OF STATE	31.7	32.9	44.5	43.1	22.9	11.8	1.5	3.7	6.2	1.8	28.7
MISSOURI											
ESTIMATED POPULATION	1865	2164	2329	2113	1095	436	27	246	132	11	961
✓ STANDARD BFRS	B	E	B	B	B	C	D	D	E	E	B
ESTIMATE % OF STATE	36.3	44.7	42.1	43.8	22.6	5.0	0.6	5.1	2.7	0.2	19.8
PENNSYLVANIA											
ESTIMATED POPULATION	1159	946	966	1333	653	160	9	54	67	5	574
✓ STANDARD BFRS	C	C	C	B	C	C	D	D	E	E	C
ESTIMATE % OF STATE	43.8	35.7	36.5	52.8	24.7	6.1	0.2	2.1	2.1	0.2	21.7

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(14 OF 17)

STATE	1000H	VOR 200CH	2+ RCVR	NAVIGATION EQUIPMENT							FLIGHT COMPT	NO HAVEQ
				DME	RNAV	LENAV	FLT DIR	RADAR	ALT			
NEBRASKA	1041	605	932	907	558	126	1	63	56	0	524	C
ESTIMATED POPULATION	C	C	C	C	C	D	D	D	D	1	1	C
ESTIMATED ERROR	C	C	C	C	C	D	D	D	D	0.9	0.9	C
ESTIMATED % OF STATE	47.9	27.8	42.9	41.7	25.6	5.8	0.1	2.9	4.5	0.9	24.1	
NEVADA	787	1335	1261	1527	576	210	65	193	233	44	312	
ESTIMATED POPULATION	C	E	B	C	C	D	D	D	D	0	0	D
ESTIMATED ERROR	C	E	B	C	C	D	D	D	D	0	0	D
ESTIMATED % OF STATE	32.2	54.6	51.6	62.5	23.6	8.6	2.7	8.2	9.5	1.8	12.4	
NEW HAMPSHIRE	534	595	754	679	416	145	13	73	65	0	261	
ESTIMATED POPULATION	C	C	C	C	D	E	E	D	D	0	0	D
ESTIMATED ERROR	C	C	C	C	D	E	E	D	D	0	0	D
ESTIMATED % OF STATE	36.5	42.9	54.3	41.3	23.2	10.5	0.3	5.3	4.7	0.0	21.6	
NEW JERSEY	1558	2444	2837	2628	1411	276	112	233	381	33	634	
ESTIMATED POPULATION	B	B	B	B	B	D	C	C	C	0	0	C
ESTIMATED ERROR	B	B	B	B	B	D	C	C	C	0.7	0.7	C
ESTIMATED % OF STATE	31.0	51.6	60.1	55.6	23.9	5.3	2.4	4.9	8.1	0.7	17.7	
NEW MEXICO	786	1272	1163	1183	699	192	6	151	114	11	34	
ESTIMATED POPULATION	C	E	B	B	C	E	D	D	D	0	0	C
ESTIMATED ERROR	C	E	B	B	C	E	D	D	D	0	0	C
ESTIMATED % OF STATE	34.0	55.1	59.4	51.5	30.3	8.3	0.3	6.9	5.0	0.5	17.1	
NEW YORK	2846	3537	3432	3538	1805	473	107	576	347	34	1620	
ESTIMATED POPULATION	B	E	B	B	B	C	C	C	C	0	0	B
ESTIMATED ERROR	B	E	B	B	B	C	C	C	C	0.5	0.5	B
ESTIMATED % OF STATE	37.0	46.0	51.2	46.0	23.5	6.2	1.4	7.5	5.2	0.5	21.1	
North Carolina	1268	2124	2512	2417	1366	436	39	416	215	20	415	
ESTIMATED POPULATION	B	E	E	E	B	C	D	C	D	0	0	C
ESTIMATED ERROR	B	E	E	E	B	C	D	C	D	0	0	C
ESTIMATED % OF STATE	31.3	52.4	61.3	59.6	33.7	12.2	1.0	10.3	5.3	0.5	20.1	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
(15 OF 17)

STATE	NAVIGATION EQUIPMENT										NO VACUUM PUMPS
	100% VOR	VOR 200% CH	2+ RCVR	ADF	DME	RNAV	LNAV	PLT DIR	RADAR	FLTMG1 CCNPF	
MISSOURI	49.2	52.2	71.7	78.0	432	144	1	6.9	4.5	2	725
ESTIMATED POPULATION	4	5	7	8	0	0	0	0	0	0	0
STANDARD ERROR	C	C	C	C	D	E	0.1	0.1	0.1	0.1	0.1
ESTIMATED % OF STATE	34.9	26.4	35.9	37.0	21.6	7.2	0.1	3.0	2.3	0.1	36.2
CHICAGO	49.6	55.3	52.8	27.3	27.3	9.1	10.7	6.8	5.0	5.3	169.1
ESTIMATED POPULATION	306.1	495.6	553.3	5	5	5	1.4	1.1	6.6	5.5	1.0
STANDARD ERROR	B	A	A	B	B	C	E	E	C	E	B
ESTIMATED % OF STATE	31.3	50.6	56.5	54.0	27.9	7.0	1.4	1.1	6.6	5.5	17.3
CLARK COUNTY	223.6	224.4	288.4	266.4	188.9	4.2	2.0	4.9	2.5	11.3	93.5
ESTIMATED POPULATION	2	2	2	2	2	2	2	2	2	2	2
STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	C
ESTIMATED % OF STATE	40.8	41.3	52.7	48.7	39.5	7.7	0.4	0.3	0.7	2.1	17.1
CORPUS CHRISTI	241.7	331.8	346.6	346.0	234.9	8.3	4.8	4.5	31.1	17	130.5
ESTIMATED POPULATION	B	B	B	B	B	C	E	C	C	E	B
STANDARD ERROR	35.2	48.4	51.5	50.4	34.3	9.5	0.7	6.6	4.5	0.3	19.0
ESTIMATED % OF STATE	35.2	48.4	51.5	50.4	34.3	9.5	0.7	6.6	4.5	0.3	19.0
PENNSYLVANIA	252.5	357.2	394.6	382.4	235.3	9.3	11.1	7.9	57.6	75	157.0
ESTIMATED POPULATION	B	B	B	B	B	B	D	B	C	E	B
STANDARD ERROR	33.4	47.3	52.3	50.6	31.2	11.0	1.5	10.6	7.6	1.3	20.9
PUERTO RICO	122	241	211	217	137	23	15	16	20	6	57
ESTIMATED POPULATION	B	C	D	D	D	D	D	D	E	E	D
STANDARD ERROR	29.3	57.8	51.4	52.0	33.0	5.6	3.6	4.4	4.9	2.2	13.7
SCOTTISH ISLANDS	53.2	126.5	125.5	112.3	57.8	162	7	217	123	5	431
ESTIMATED POPULATION	C	E	E	B	C	E	D	D	C	C	C
STANDARD ERROR	24.0	57.0	56.6	50.6	26.1	7.3	0.4	0.4	0.4	0.3	19.5
SCOTTISH ISLANDS	53.2	126.5	125.5	112.3	57.8	162	7	217	123	5	431
ESTIMATED POPULATION	C	E	E	B	C	E	D	D	C	C	C
STANDARD ERROR	24.0	57.0	56.6	50.6	26.1	7.3	0.4	0.4	0.4	0.3	19.5

STANDARD ERROR		CODE
GREATER THAN	LESS THAN	
		EQUAL TO
0.1	1.0	A
1.0	2.0	E
2.0	3.0	C
3.0	4	D

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980
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STATE	NAVIGATION EQUIPMENT									
	VOR 10.7 MHZ	VOR 20.1 MHZ	2 ^o RCVR	ADF	DME	RNAV	LNAV	FLT DIS	RADAR ALR	FLIGHT COMPT
SOUTH DAKOTA										
ESTIMATED POPULATION	549	553	636	574	197	57	2	12	5	1
* STABILIZED PERCENT	C	C	C	D	C	C	C	C	C	169
ESTIMATED % OF STATE	16.2	19.4	11.5	17.9	13.1	3.8	1.2	1.2	1.2	1.2
TENNESSEE										
ESTIMATED POPULATION	252	1788	2137	2352	1227	483	11	221	224	7
* STABILIZED PERCENT	C	E	B	D	B	C	C	C	C	467
ESTIMATED % OF STATE	25.6	55.2	66.1	63.3	37.9	14.9	3.2	6.2	6.2	14.4
TEXAS										
ESTIMATED POPULATION	1066	10228	10952	10665	7336	3240	832	2425	2155	4351
* STABILIZED PERCENT	A	A	A	A	A	E	E	E	E	A
ESTIMATED % OF STATE	33.3	48.2	51.6	51.2	33.1	15.3	3.0	11.4	11.1	71.5
OKLAHOMA										
ESTIMATED POPULATION	703	699	874	975	380	100	11	102	76	5
* STABILIZED PERCENT	C	C	C	C	D	E	E	E	E	249
ESTIMATED % OF STATE	43.7	42.9	54.3	54.4	23.6	6.3	0.5	6.4	4.5	14.9
VERMONT										
ESTIMATED POPULATION	203	225	228	241	133	16	2	24	22	6
* STABILIZED PERCENT	C	C	D	D	D	F	F	F	F	124
ESTIMATED % OF STATE	38.0	42.1	42.6	45.1	25.3	3.6	0.5	4.6	4.2	23.2
VIRGINIA										
ESTIMATED POPULATION	1366	1778	2063	1902	809	190	43	289	158	65
* STABILIZED PERCENT	B	E	B	B	C	C	C	C	C	649
ESTIMATED % OF STATE	36.6	50.2	59.4	53.5	22.3	5.4	1.2	8.2	4.5	18.4
WASHINGTON										
ESTIMATED POPULATION	2730	3390	3665	3380	1562	381	69	271	278	5
* STABILIZED PERCENT	E	E	B	B	B	D	D	D	D	205
ESTIMATED % OF STATE	36.3	42.2	45.6	42.2	19.4	4.7	0.5	3.5	3.5	24.9
* STANDARD ERROR * GREATER THAN * THAN OR * EQUAL TO * 0.1 * 10.1 * 20.1 * 30.1 * 39.1										
* CODE * A * B * C * D * E										

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1980

NOTE : CCJLUS SUBSTANCES MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1980
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TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1980
(2 of 6)

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1980
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REGION	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT						ILS RECEIVING EQUIPMENT					
	360 CH	720 CH	2+ SYS	NO COM	4096 CODE	ALT ENC	IC TRANS	LOC	HKR BBC	GLIDE SLOPE	MILS	MILS	NO ILS	NO ILS				
WESTERN																		
ESTIMATED POPULATION	21286	18227	21262	6063	29445	14415	14810	25104	22999	19844	219	18357						
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A						
ESTIMATED % OF REGION	48.8	41.8	48.0	13.9	67.6	33.1	34.0	57.6	52.6	45.5	0.5	42.1						
TOTAL																		
ESTIMATED POPULATION	124789	59149	118958	41820	156179	71765	99511	135044	122626	105889	816	114617						
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A						
ESTIMATED % OF PCP	48.8	38.4	46.5	16.4	61.1	28.1	38.9	53.1	47.9	41.4	0.3	44.6						

NOTE : COLUMNS SUMMATIONS MAY TOTAL EACH PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR GREATER THAN	CODE		
	LESS THAN OR EQUAL TO	0	10
0	1	A	A
10	1	B	B
20	1	C	C
30	1	D	D

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1980
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REGION	NAVIGATION EQUIPMENT										
	VOR 100CB	WOR 200CB	2+ RCVR	ADF	DME	MEAS	FLYBY	FLY DIS	RADAR ALT	FLIGHT COMPT	NO NAVEQ
ALASKA											
ESTIMATED POPULATION	3598	2249	1436	3564	583	52	21	33	102	8	1373
% STANDARD ERROR	A	B	B	C	D	D	E	E	D	B	B
ESTIMATED % OF REGION	48.5	30.3	19.4	48.0	7.9	0.7	0.3	0.5	1.4	0.1	16.5
CENTRAL											
ESTIMATED POPULATION	5922	7286	7843	7610	4137	1386	82	1009	722	56	3628
% STANDARD ERROR	A	A	A	A	A	B	D	B	E	D	B
ESTIMATED % OF REGION	36.1	44.4	47.6	46.4	25.2	6.4	0.5	6.2	4.4	0.3	22.1
EASTERN											
ESTIMATED POPULATION	10103	13928	15711	14644	7917	2244	454	2151	1715	260	5454
% STANDARD ERROR	A	A	A	A	A	B	B	B	E	C	A
ESTIMATED % OF REGION	35.2	48.5	54.7	51.0	27.6	7.6	1.6	7.5	6.0	0.9	19.0
EUROPEAN											
ESTIMATED POPULATION	19	312	301	312	262	67	94	107	97	10	33
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D	D
ESTIMATED % OF REGION	3.9	83.2	80.4	83.4	69.9	18.0	25.1	28.6	26.1	2.8	9.1
GREAT LAKES											
ESTIMATED POPULATION	16053	20739	23092	21699	11698	4154	479	2740	2458	537	9650
% STANDARD ERROR	A	A	A	A	A	A	B	A	A	C	A
ESTIMATED % OF REGION	35.3	45.6	50.9	47.7	25.7	9.1	1.1	6.0	5.4	1.2	21.2
NEW ENGLAND											
ESTIMATED POPULATION	3672	3667	4462	4198	2077	592	91	377	458	33	1019
% STANDARD ERROR	E	E	A	B	B	C	D	C	D	B	B
ESTIMATED % OF REGION	42.3	40.1	48.8	45.9	22.7	6.5	1.0	4.1	5.0	0.4	19.9

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %		10 %	4
10 %		20 %	B
20 %		30 %	C
30 %		D	D

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1980
(5 OF 6)

REGION	NAVIGATION EQUIPMENT																							
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	HEAVY LEAH	FLT DIR	RADAR ALT	FLIGHT COMPTS	NO BAVRC														
BOULDER																								
ESTIMATED POPULATION	6169	7607	3191	7971	4416	1014	123	817	615	25														
% STANDARD ERROR	A	A	A	A	A	B	C	C	D	3891														
ESTIMATED % OF REGION	35.2	43.4	46.8	45.5	25.2	5.8	0.7	4.7	3.5	0.1														
PACIFIC																								
ESTIMATED POPULATION	186	288	272	239	86	12	7	25	14	3														
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	88														
ESTIMATED % OF REGION	31.4	48.5	45.8	40.3	14.5	2.1	1.2	4.3	2.4	0.6														
BUCKY MOUNTAIN																								
ESTIMATED POPULATION	5640	5841	6536	6706	3535	844	50	678	469	25														
% STANDARD ERROR	A	A	A	A	B	C	C	C	D	3343														
ESTIMATED % OF REGION	38.8	40.2	45.0	46.1	24.3	5.8	0.4	4.7	3.2	0.2														
SCOTTISH																								
ESTIMATED POPULATION	11527	17893	19742	19268	10565	3203	528	2645	2150	268														
% STANDARD ERROR	A	A	A	A	A	E	C	A	E	6808														
ESTIMATED % OF REGION	32.1	49.8	54.9	53.6	29.4	9.0	1.5	7.4	6.0	0.7														
SOUTHERN																								
ESTIMATED POPULATION	12159	16594	18103	17787	11505	4532	954	3430	2997	541														
% STANDARD ERROR	A	A	A	A	A	A	B	A	C	7922														
ESTIMATED % OF REGION	33.6	45.9	50.1	49.2	31.8	12.5	2.6	9.5	8.3	1.5														
WESTERN																								
ESTIMATED POPULATION	15265	21635	23035	21257	11817	3275	440	3032	2231	296														
% STANDARD ERROR	A	A	A	A	A	A	E	C	E	7970														
ESTIMATED % OF REGION	35.0	49.6	52.9	48.8	27.1	7.5	1.0	7.0	5.1	0.7														
<table border="1"> <tr> <td>STANDARD ERROR</td> <td>CODE</td> </tr> <tr> <td>GREATER THAN</td> <td></td> </tr> <tr> <td>LESS THAN OR EQUAL TO</td> <td></td> </tr> <tr> <td>0.1</td> <td>10</td> </tr> <tr> <td>1.3</td> <td>20</td> </tr> <tr> <td>2.0</td> <td>30</td> </tr> <tr> <td>3.0</td> <td>D</td> </tr> </table>											STANDARD ERROR	CODE	GREATER THAN		LESS THAN OR EQUAL TO		0.1	10	1.3	20	2.0	30	3.0	D
STANDARD ERROR	CODE																							
GREATER THAN																								
LESS THAN OR EQUAL TO																								
0.1	10																							
1.3	20																							
2.0	30																							
3.0	D																							

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1980
(6 OF 6)

REGION	NAVIGATION EQUIPMENT							
	VOR 100CH	VOR 200CH	2+ RCVB	ADF	DME	RNAV	PLT DIR ALT	FLIGHT COMPIS
TOTAL								
ESTIMATED POPULATION	88773	118488	128414	126255	70800	22553	3836	18766
% STANDARD ERROR	4	4	1	1	4	1	1	1
ESTIMATIVE % OF POP	34.7	46.3	50.2	49.4	27.7	8.8	1.5	7.3
							6.0	0.9
								20.6

NOTE : COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION ERRORS.

STANDARD ERROR	CODE
GREATER THAN	-----
LESS THAN	-----
OR	-----
EQUAL TO	-----
0 %	10 %
10 %	20 %
20 %	30 %
30 %	D

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1980 (1 OF 4)

PRIMARY USE	VHF COMMUNICATIONS						TRANSPONDER EQUIPMENT						ILS RECEIVING EQUIPMENT					
	360 CF	720 CB	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	SKRB PEC	GLIDE SLOPE	HLS	NO ILS						
EXECUTIVE																		
ESTIMATED FORMATION	4374	11791	11305	193	14472	12234	1060	14106	13591	13178	295	1344						
% STANDARD PERSO	A	A	D	A	A	A	E	A	A	A	D	B						
ESTIMATED % CP USE	29.5	79.4	80.2	1.3	97.5	92.4	7.1	95.0	91.5	88.8	2.0	9.1						
BUSINESS																		
ESTIMATED FORMATION	23649	29243	36710	1478	94930	25718	6166	40105	38647	35339	43	10152						
% STANDARD PERSO	A	A	B	A	A	A	A	A	A	A	D	A						
ESTIMATED % OF USE	47.9	59.3	74.4	3.0	91.1	52.1	12.5	81.3	78.3	71.6	0.1	20.6						
PERSONAL																		
ESTIMATED FORMATION	65523	26754	43586	12884	56428	16671	45113	45838	40935	31397	351	52361						
% STANDARD PERSO	A	A	A	A	A	A	A	A	A	A	D	A						
ESTIMATED % CP USE	68.6	28.0	45.6	13.5	59.1	17.5	47.2	48.0	42.9	32.9	0.4	58.8						
AERIAL APPLICATION																		
ESTIMATED FORMATION	1123	685	577	6087	962	343	6915	731	481	397	0	7066						
% STANDARD PERSO	B	C	C	A	B	D	A	C	C	C	A	A						
ESTIMATED % CP USE	15.4	9.4	7.9	33.5	13.2	4.7	94.8	10.0	6.6	5.4	0.0	96.9						
INSTRUCTIONAL																		
ESTIMATED FORMATION	7087	8148	4752	636	10615	2259	4890	6902	5663	4918	78	6546						
% STANDARD PERSO	A	A	A	B	A	B	A	A	A	A	D	A						
ESTIMATED % OF USE	49.0	56.3	32.8	4.4	73.4	15.9	33.8	61.5	39.1	34.0	0.5	45.2						

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %	10 %	10 %	20 %
0 %	10 %	10 %	20 %
20 %	30 %	30 %	40 %
30 %	40 %	40 %	50 %

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1980 (2 OF 4)

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1980 (3 OF 4)

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1980 (4 OF 4)

ESTIMATED USE	NAVIGATION EQUIPMENT										NO. MAVED
	VOB 100CH	VOR 200CH	2+ BCV	ADF	DME	BEV	LORV	FLT DIR	RADAR	FLIGHT COMPTS	
NON TAI											
ESTIMATED POPULATION	1723	5934	6365	7338	5187	1650	275	1393	913	56	250
⁴ STANDARD ERROR	⁸	⁴	⁴	^A	^B	^B	^D	^B	^B	^D	^C
⁵ ESTIMATE % OF USE	22.6	77.9	83.9	96.4	68.1	21.7	3.6	18.3	12.0	0.7	3.3
INDUSTRIAL/SPECIAL											
ESTIMATED POPULATION	771	1609	1325	1548	715	55	63	175	202	6	589
⁴ STANDARD ERROR	^C	^E	^B	^B	^C	^D	^D	^D	^D	^D	^B
⁵ ESTIMATE % CP USE	21.4	57.2	47.1	55.0	25.4	2.0	1.5	6.2	7.2	0.2	21.0
BUSINESS											
ESTIMATED POPULATION	3124	8520	8030	8489	3226	504	55	251	254	13	608
⁴ STANDARD ERROR	^B	^A	^A	^A	^B	^C	^D	^C	^D	^D	^C
⁵ ESTIMATE % CP USE	26.9	72.9	69.3	72.7	27.6	4.3	0.5	2.2	2.2	0.1	5.2
CIVIL											
ESTIMATED FCPOPULATION	1399	2609	2314	2500	1498	519	198	698	594	37	1548
⁴ STANDARD FCPOP	^B	^E	^B	^B	^B	^C	^C	^B	^B	^D	^B
⁵ ESTIMATE % OF USE	21.0	50.3	44.6	48.2	28.9	10.0	3.8	13.5	11.5	0.7	29.9
INACTIVE											
ESTIMATED POPULATION	8382	4478	4311	4122	1368	408	150	541	285	81	21254
⁴ STANDARD ERROR	^A	^A	^A	^A	^A	^B	^C	^B	^A	^D	^A
⁵ ESTIMATE % CP USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL											
ESTIMATED POPULATION	68773	118488	129414	126255	70800	22553	3836	16766	15606	22	52810
⁴ STANDARD ERROR	^A	^B	^A	^E	^A						
⁵ ESTIMATED % CP PCP	34.7	46.3	50.2	49.4	27.7	8.8	1.5	7.3	6.0	0.9	20.6

NOTE : COLUMNS SUMMARIES AND TOTALS ARE UNITS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR	CODE
⁴ GREATER THAN	⁴
⁵ LESS THAN OR EQUAL TO	⁵
⁶ 0.9	⁶
⁷ 10 %	⁷
⁸ 20 %	⁸
⁹ 30 %	⁹
¹⁰ 40 %	¹⁰

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (1 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)		PERCENT STANDARD ERROR
		STANDARD ERROR	STANDARD ERROR	
CIRRUS 01	4246.5	529.4	12.5	
CIRRUS 02	2617.3	477.4	18.2	
CIRRUS 03	673.4	236.2	35.1	
CIRRUS 04	850.5	195.5	23.0	
CIRRUS 05	912.0	151.3	16.6	
CIRRUS 06	175.5	62.9	35.8	
CIRRUS 07	3317.5	473.2	14.3	
CIRRUS 08	15.6	18.8	24.9	
CIRRUS 09	866.9	442.8	51.1	
CIRRUS 10	728.6	91.1	12.5	
CIRRUS 11	938.4	139.4	14.9	
CIRRUS 12	875.1	147.7	16.7	
CIRRUS 13	639.0	165.3	25.9	
ACADES A505	6.4	1.0	16.1	
ABERDEEN J2	5.8	1.0	17.7	
ABERDEEN PSA 316	200.4	81.7	20.0	
ABERDEEN PSA 341	103.5	21.2	20.5	
AGUSTA 1205	460.9	127.9	27.8	
ASPIRE 58	955.9	266.2	28.2	
B188C18	23.3	13.0	59.3	
B188C1900	306.8	54.4	17.7	
AND FALC10	231.4	36.3	15.7	
AND FALC20	988.4	122.9	12.4	
ARCTIC 514	274.2	10.2	3.7	

NOTE: SEE FOLLOWING PAGE FOR CODING.

NOTE: Other XX refers to all general aviation aircraft belonging to manufacturer/model groups of fewer than 20 aircraft in size for aircraft XX where XX stands for

- 01 Fixed wing piston, 1 engine, 1-3 seats.
- 02 Fixed wing piston, 1 engine, 4+ seats.
- 03 Fixed wing piston, 2 engine, 1-6 seats.
- 04 Fixed wing piston, 2 engine, 7+ seats.
- 05 Fixed wing piston, other.
- 06 Fixed wing turboprop, 2 engines, 1-12 seats.
- 07 Fixed wing turboprop, 2 engines, 13+ seats.
- 08 Fixed wing turboprop, other.
- 09 Fixed wing turbojet, 2 engines.
- 10 Fixed wing turbojet, other.
- 11 Rotorcraft, piston.
- 12 Rotorcraft, turbine.
- 13 Other aircraft.

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
 CY 1980 (2 OF 13)

CONTINUED

MANUFACTURER / MODEL	BOEHS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
ARCTIC 181	30.6	4.9	15.6
AROBAT 5	569.0	47.7	8.4
AROBAT 5	421.6	36.0	8.5
AROBAT 3	77.1	9.8	12.7
ASPCA 58	265.6	26.5	9.9
AVIAZ FALCON	2.0	0.3	14.9
AVIAZ S2	2115.3	240.6	11.8
BAC 111	419.6	21.5	5.1
BAC B206	80.3	17.2	21.5
BAC DH125	52.5	6.9	13.1
BAC JETSTB	70.4	11.5	16.3
BALIKSPRIFT	74.0	8.2	11.1
BIRCH 100	629.0	113.6	18.1
BIRCH 17	386.9	15.9	4.1
BIRCH 18	8580.4	1966.3	22.9
BIRCH 200	652.6	102.4	15.7
BIRCH 23	4799.4	3400.1	7.1
BIRCH 33	4381.2	922.1	21.0
BIRCH 35	19506.2	9433.3	4.8
BIRCH 36	1569.7	247.6	15.6
BIRCH 45	1327.2	1341.3	10.1
BIRCH 50	1957.7	107.1	5.5
BIRCH 55	4819.5	691.7	14.4
BIRCH 56	153.6	11.7	7.6
BIRCH 56	1501.3	191.5	12.8

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
 CY 1980 (3 OF 13)

CONTINUED

MANUFACTURER / MODEL	HOURS ESTIMATED [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	
		STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 60	1029.9	399.2	38.8
BEECH 65	817.8	102.3	12.5
BEECH 76	86.3	22.4	25.4
BEECH 77	46.3	3.1	6.4
BEECH 80	902.0	209.9	23.3
BEECH 90	2804.2	356.2	12.7
BEECH 95	1935.0	500.7	25.9
BEECH 99	1532.5	68.0	4.4
BELL 204	643.0	37.3	5.8
BELL 206	4583.2	713.0	15.6
BELL 212	325.3	110.1	33.9
BELL 47	9133.3	928.2	10.2
ELANCA 11	1506.7	103.7	6.9
ELANCA 1413	471.4	20.6	4.4
ELANCA 1419	448.1	32.8	7.3
ELANCA 17	1070.7	42.7	4.0
ELANCA 27	12504.0	828.9	6.6
ELANCA 28	348.5	88.5	25.4
BOEING 802	3914.8	48.7	12.4
BOEING 707	3080.4	103.5	3.4
BOEING 720	9134.4	19.6	2.1
BOEING 727	3163.5	87.7	9.3
BOEING 737	23.5	8.2	37.8
BOEING 747	686.1	8.9	9.4
BOEING 757	7239.9	686.1	9.4

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (4 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR	
			CONTINUED	
BOEING105	148.7	32.2		21.6
BOEING125	391.2	32.6		8.3
BRASOVIS28	15.0	1.3		8.5
BUXTONPLANE2	87.6	6.0		6.8
BUXTONPLANE7	61.9	9.2		14.9
BURKE 131	44.8	6.9		15.3
CABONBODILC	16.6	8.7		52.2
CCOPIER7BELL	97.5	40.6		41.6
CESSNA120	2406.0	178.9		7.4
CESSNA140	7136.2	505.6		7.1
CESSNA150	52471.0	3471.2		6.6
CESSNA170	7506.9	962.5		12.8
CESSNA172	47198.4	1936.9		8.1
CESSNA175	2859.3	140.2		4.9
CESSNA177	4038.6	277.1		6.9
CESSNA180	9183.9	1494.3		16.3
CESSNA182	24199.9	1004.0		8.1
CESSNA185	2091.3	653.1		21.7
CESSNA188	3254.4	718.6		22.1
CESSNA190	199.1	8.4		4.2
CESSNA195	1915.0	156.3		8.2
CESSNA206	4059.5	411.3		10.1
CESSNA207	1364.1	257.9		16.9
CESSNA210	8573.0	687.5		9.9
CESSNA305	3199.1	1729.1		16.5

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (5 OF 13)

CONTINUED

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
CESSNA 310	10542.5	1209.9	11.5
CESSNA 320	1237.5	143.0	11.6
CESSNA 335	4.6	0.9	19.1
CESSNA 336	198.9	7.6	3.8
CESSNA 337	2178.4	265.6	12.2
CESSNA 340	882.5	93.5	10.6
CESSNA 401	867.7	70.6	8.1
CESSNA 402	1595.1	531.0	33.3
CESSNA 404	113.9	30.5	30.3
CESSNA 411	527.9	62.5	11.8
CESSNA 414	569.3	187.9	33.0
CESSNA 421	1058.6	212.9	11.5
CESSNA 441	90.2	12.9	14.3
CESSNA 500	816.0	159.6	19.6
CESSNA 550	202.5	32.9	16.2
CESSNA C77	51.4	22.8	44.4
Cessna 52	92.3	4.6	5.0
CC110 S2	85.8	6.0	13.0
CC110 S5	148.9	7.3	5.0
CC110 S6	319.6	16.7	5.2
CC715C6	753.7	125.5	16.6
CC715C8	22.9	6.8	29.7
CC715C9	38.7	3.2	8.3
CC715C10	610.9	29.0	4.8
CVAC 22	1057.5	70.3	7.4

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
 CY 1980 (6 OF 15)

CONTINUED		HOURS ESTIMATED [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	PERCENT STANDARD ERROR
MANUFACTURER / MODEL				
CPAC 240		1305.6	165.1	12.6
CPAC 340		558.4	173.9	31.1
CPAC 440		396.2	90.0	0.0
CPAC BT13		262.4	16.8	6.4
CPAC L13		16.4	4.4	26.8
CPAC STC500		1188.2	84.8	7.4
DASS 6		28.0	1.6	5.7
DAVA DDC1		388.9	53.9	13.9
DAVA DDC2		2794.7	594.4	21.3
DAVA DDC62		308.2	49.7	16.6
DOUG A26		261.2	30.4	11.6
DOUG DC3		10132.6	1764.4	17.4
DOUG DC4		3910.6	545.4	13.9
DOUG DC6		3821.9	322.5	8.4
DOUG DC7		1029.2	80.5	7.8
DOUG DC8		2694.2	158.9	5.9
DOUG DC9		418.3	70.4	16.8
DOUG D20		30.6	4.3	14.2
EMB 120 BA1		333.5	5.2	15.6
EMB 110		45.5	8.3	18.2
EMB120B20		332.3	45.8	13.8
EMB120B28		37.3	6.4	17.2
EMB120B30		569.3	36.4	6.4
EMB120C119		173.0	3.9	2.3
EMB120C27		447.8	54.0	12.1

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (7 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR	
			CONTINUED	CONTINUED
ACROBATIC	681.3	221.4	32.5	
ACROBATIC	2.6	0.6	21.6	
ACROBATIC	121.9	6.4	6.9	
ACROBATIC	9.2	1.3	14.5	
ACROBATIC	112.9	7.8	6.9	
ACROBATIC	81.4	7.0	8.6	
ACROBATIC	662.0	105.1	11.9	
ACROBATIC	1202.6	162.4	13.5	
ACROBATIC	1493.9	167.3	11.2	
ACROBATIC	909.6	140.8	16.4	
ACROBATIC	678.5	77.7	11.5	
ACROBATIC	846.0	73.7	8.7	
ACROBATIC	696.0	83.1	11.9	
ACROBATIC	1469.7	79.6	5.4	
ACROBATIC	2132.4	424.7	19.9	
ACROBATIC	566.8	41.0	6.1	
ACROBATIC	398.7	25.5	6.4	
ACROBATIC	34.6	5.3	15.4	
ACROBATIC	52.3	5.6	10.7	
ACROBATIC	207.6	12.5	6.0	
ACROBATIC	31.2	8.2	26.2	
ACROBATIC	69.0	7.0	10.2	
ACROBATIC	200.2	63.3	31.6	
ACROBATIC	2555.1	352.1	13.8	
ACROBATIC	1754.4	271.2	15.5	

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (8 OF 13)

CONTINUED

MANUFACTURER / MODEL	HOURS ESTIMATED (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
ACROBATIC	1007.4	219.9	20.2
ACROBATIC 100	253.7	50.4	19.9
ACROBATIC 110	1035.2	65.6	6.3
ACROBATIC 125	170.7	22.1	12.9
AVIUS 82	170.3	11.6	6.8
AVIUS 1121	548.1	49.0	8.9
AVIUS 1123	47.9	2.2	4.6
AVIUS 1129	113.0	20.4	17.9
AVIUS 115	136.7	7.6	5.6
AVIUS 100	508.2	72.8	14.3
BAE 145	46.2	9.0	19.4
BAE 23	473.2	45.2	9.5
BAE 28	889.2	80.0	9.4
BAE 25	562.3	96.2	17.1
BAE 35	262.0	82.8	15.0
BAF 1.13	105.4	16.5	17.6
BAE 1329	231.0	40.2	17.3
BAE 1329	483.6	70.6	14.6
BAE 1329	572.8	68.5	12.0
BAE 1329	408.5	10.3	2.5
BAE 1329	181.9	51.7	28.4
BAE 1329	296.5	17.4	5.9
BAE 1329	4595.0	230.4	5.0
BAE 1329	1042.0	214.9	20.6
BAE 1329	424.8	64.9	15.3

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (9 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	PERCENT STANDARD ERROR	
			CONTINUED	
BAEWS 85	172.3	21.0	12.2	
MC LISH PIONEER	393.2	63.8	16.2	
MBB B707B	103.9	3.6	3.5	
MB CUPRA 9	320.1	66.6	20.8	
MBB B707B 16	183.7	8.6	4.7	
MBB B707B 20	10754.8	1067.8	9.9	
MB CUPRA 205	42.9	2.0	4.8	
MBB B707B 02	1200.0	193.0	15.3	
MULTICD 16	122.7	5.3	4.3	
NAIRN 925	263.5	30.5	11.6	
NAIRN P51	211.3	20.3	9.6	
NAIRN 9A260	203.6	56.0	27.5	
NAIRN 76	1633.6	308.2	18.6	
NAIRN 938	1076.0	245.9	22.5	
NAIRN NAVIG	1905.5	272.2	14.3	
NAIRN SVA	72.6	6.3	8.7	
CBERLINS 19	124.9	6.5	5.2	
PICORDAX 6	28.1	8.6	30.7	
PICORDAX 4	10.9	0.9	7.9	
PICORDAX 600	176.8	31.6	17.9	
PICORDAX J2	71.5	4.1	5.8	
PICORDAX J3	13431.6	1302.4	10.3	
PICORDAX J4	484.3	18.9	3.9	
PICORDAX J5	1109.3	51.0	4.6	
PICORDAX PA12	3402.0	168.3	4.8	

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (10 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD DEVIATION (IN THOUSANDS)	PERCENT STANDARD ERROR
			CONTINUED
PIPER PA14	292.6	22.6	7.7
PIPER PA15	321.2	18.9	5.9
PIPER PA16	748.5	176.1	23.5
PIPER PA17	361.9	74.7	21.0
PIPER PA18	8672.3	833.1	9.6
PIPER PA20	1033.8	54.6	5.3
PIPER PA22	1398.1	460.7	3.5
PIPER PA23	13117.5	2631.0	20.1
PIPER PA24	9386.4	459.0	5.0
PIPER PA25	5419.7	1135.8	21.0
PIPER PA26	46638.0	1902.4	4.1
PIPER PA30	4032.9	238.5	5.9
PIPER PA31	4303.1	395.0	9.2
PIPER PA317	360.4	79.0	20.0
PIPER PA32	6012.7	1211.6	20.2
PIPER PA38	2669.0	207.5	8.0
PIPER PA36	462.4	62.7	13.0
PIPER PA38	1053.6	99.0	9.5
PIPER PA44	167.4	32.7	19.6
PIPER PRC1	14.5	2.6	17.5
PEOTONI 200	159.4	4.2	2.6
SABER 165	158.9	6.3	4.0
DAVID 816	25.0	7.9	31.5
DAVID 550	21.6	1.2	5.3
DAVID 555	85.3	25.3	29.6

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (11 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	CONTINUED	
		STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
DAVIN 560	7.1	1.0	14.1
DEON 1112	66.5	74.5	10.9
DEON 1500	1510.1	180.8	11.9
DEON 1520	231.6	16.0	6.9
DEON 1560	630.7	134.4	16.2
DEON 1600	1597.0	200.5	12.6
DEON 1600TP	491.4	84.9	9.1
DEON 1690TP	451.6	73.8	16.3
DEON 1700	12.0	0.5	4.5
DEON 1825	863.4	188.3	21.6
DEON 2222	10.3	2.7	26.6
DEON 255	35.3	13.9	39.4
DEON 373	85.0	40.6	9.1
DEON 374	68.3	6.4	17.5
SCUBA 15	27.3	3.1	11.4
SCUBA 19	11.2	1.4	12.6
SCUBA 20	11.5	0.9	8.0
SCUBA 20	25.9	1.9	7.4
SCUBA 46	63.9	7.8	12.2
SCUBA 51	618.5	78.4	12.7
SCUBA 52	1069.9	132.8	12.4
SCUBA 38	61.7	20.6	33.3
SEACO CLIPPER	5.2	1.2	23.0
SEACO MANTA	5.6	0.8	13.9
SEACO 355	456.7	45.5	10.0

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (12 OF 13)

MANUFACTURER / MODEL	NUMBER ISSUED (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
SEASIDE 1550	350.9	20.3	5.6
SEASIDE 350T	119.4	9.4	7.9
SEASIDE 576	26.0	12.9	46.0
SEASIDE 100	98.7	43.6	8.7
SEASIDE 600	631.5	165.6	26.2
SEASIDE 350	83.3	48.2	57.6
SEASIDE SA310	150.0	14.3	9.6
SOCATA T14	24.5	1.8	7.2
SOCATA T14	11.0	0.6	7.6
SOCATA T14	67.7	6.9	10.2
SOCATA T14	14.9	2.3	15.3
SOCATA T14	92.3	9.7	22.6
SOCATA T14	323.0	12.0	3.7
SOCATA T15	179.7	27.5	15.3
SOCATA T15	69.5	3.4	4.9
SOCATA T10	263.5	12.0	4.5
SOCATA T15	127.1	4.1	3.2
SOCATA V	20.2	0.7	3.7
SOCATA 226	586.7	110.0	18.8
SOCATA 26	540.6	72.4	13.4
TCNAPTA	55.5	16.2	29.1
TCNAPTEC	5495.8	1021.4	18.6
TCNAPTEP	100.1	6.1	6.1
TCNAPTEL	465.7	67.4	14.5
TRICO 11A	46.4	1.7	3.6

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1980 (13 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	PERCENT STANDARD ERROR	
			CONTINUED	
TRIBBLEDAK7	12.9	5.0	38.4	
TRISOBRAVIC8	613.4	89.7	14.6	
TRITERR	39.3	2.5	6.5	
TRIVACGC1	1099.7	82.0	7.5	
TRIVAS108	4207.5	229.1	5.4	
TRIVAS415	4061.8	243.8	6.0	
VASCA 2150	96.0	13.7	14.3	
VICEST745	431.9	62.6	14.4	
VACC 450	105.8	11.6	11.0	
VACC 678	87.2	5.5	11.6	
VACO R	68.2	8.5	6.6	
VACO U	52.0	3.8	7.3	
VICC UP77	556.5	15.1	2.7	
VICC YK	125.8	11.5	9.1	
VICER65	975.2	322.3	33.0	
VIFL1201	98.2	12.1	12.6	
TOTAL AIRCRAFT	507227.	7761.6	1.3	

TABLE 2-17 GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES BY ENGINE MANUFACTURER/MODEL
GROUP - CY 1980 (1 OF 3)

ENGINE MANU/ MODEL GROUP	ESTIMATE OF ACTIVE PCFDATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
ALLIS 250C	1846	3.59	73.85	549	9.52
ALLEN 501D	231	10.80	67.50	548	6.57
AMT FMCBC01E	113	18.13	22.51	24	9.75
ARSFCHTYPE31	262	3.61	95.50	438	9.24
ARSFCHTYPE331	712	3.39	93.67	439	5.98
CCMT 6285	172	11.84	86.22	316	17.09
CCMT 375	26	17.00	92.47	261	26.03
CCBT A90	54	28.63	42.98	9	8.66
CCMT A50	2	29.167	6.05	20	3.01
CCMT A65	5495	4.91	53.14	70	21.41
CCMT A-5	1314	9.80	57.81	46	15.60
CCBT A30	57	33.63	68.34	13	49.23
CCMT C125	268	17.59	62.81	69	19.66
CCMT C145	2136	4.12	88.98	79	13.66
CCBT C95	3312	5.52	57.65	63	9.42
CCBT C-0	1942	7.35	71.42	70	12.72
CCMT E185	1855	5.58	82.80	92	11.17
CCMT E225	1497	4.61	93.01	109	13.23
CCBT 020J	13918	2.22	86.01	161	9.66
CCBT 030J	9714	2.33	90.15	20	7.93
CCMT 0346	265	16.64	76.56	56	25.85
CCBT 0360	3767	2.41	54.55	157	7.94
CCBT 0479	25279	1.26	90.34	152	4.32
CCBT 0529	26112	0.87	34.56	270	3.37
CMT R670	511	12.56	46.93	92	18.45
EBVXG1PS1	43	52.31	33.33	53	24.32
ICD 6440	160	16.08	42.00	54	14.52
FBKLNAC150	8	51.11	32.88	80	29.73
FBKLNAC176	120	28.63	57.78	94	39.22
FBKLNAC195	35	29.13	20.32	19	39.00
FBKLNAV350	133	8.93	71.41	110	31.39
FBKLN674	131	34.49	65.28	396	46.86
GB CF6	1	0.00	0.00	0	0.00
GP CP700	456	0.00	100.00	512	7.55
GP CJ610	937	2.36	94.80	425	5.50
GP CJ805	21	14.54	28.29	476	11.83
GP CJ805f	8	0.00	37.50	195	4.27
GP CT58	28	0.00	100.00	1244	19.87
GLA10K5	6	51.76	13.55	26	9.15
GLA10K5	122	20.93	61.90	113	33.96

TABLE 2-17 GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES BY ENGINE MANUFACTURER/MODEL
GROUP - CY 1980 (2 OF 3)

ENGINE MANU/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR	
JACCBP755	234	7.42	63.18	83	13.30	
JACCBSP755	140	14.61	34.14	60	34.81	
JACCBSP915	37	42.95	45.14	99	52.92	
LYC LTS101	21	33.42	73.17	448	0.00	
LYC 0145	458	10.58	52.76	83	15.49	
LYC 0235	9479	2.37	83.99	324	6.60	
LYC 0290	1901	6.44	57.52	51	10.77	
LYC 0320	35848	1.07	89.93	189	4.69	
LYC 0340	105	16.20	76.32	60	10.33	
LYC 0360	25347	0.93	93.90	174	4.11	
LYC 0435	1173	6.61	63.38	244	12.65	
LYC 0480	1245	4.04	73.08	153	7.14	
LYC 0540	20690	1.36	89.94	244	3.86	
LYC 0541	1122	1.18	93.23	244	10.05	
LYC 0720	29	9.06	94.43	289	21.26	
LYC 8689	198	24.55	28.34	43	23.14	
LYC T53	79	6.96	95.77	313	32.17	
MISSCC4	1	37.25	35.00	13	22.74	
CWA B48	16226	2.37	67.24	257	3.95	
FCKARDV1650	53	17.76	47.00	69	18.43	
PWA JT12	711	2.66	56.89	429	5.47	
PWA JT15	493	0.03	100.00	463	7.06	
PWA JT3C	26	15.11	36.36	359	5.92	
PWA JT3D	210	14.85	36.80	492	11.41	
PWA JT4	19	22.23	41.36	735	11.46	
PWA JT5	1251	0.00	100.00	653	12.23	
PWA JT9	112	0.03	100.00	448	0.00	
PWA PT6	3382	0.83	98.86	611	3.60	
PWA PT6T	128	0.00	100.00	839	13.38	
PWA R1340	1912	5.95	77.18	353	12.31	
PWA R1930	325	14.99	54.49	243	15.50	
PWA R2000	31	12.99	43.58	261	20.97	
PWA R2800	625	6.20	61.42	485	11.62	
PWA R985	2594	6.90	57.28	279	13.92	
FCYCECART	515	4.16	92.21	533	9.05	
FCYCEGIPSY	24	19.89	27.81	851	16.13	
FCYCESPY	442	0.00	100.00	514	4.93	
FCYCEVIPER	215	2.96	95.94	391	5.90	
THECA AST13	17	12.79	76.48	662	13.43	
THECA AST141	37	0.00	100.00	270	10.99	
THECA AST21	43	0.00	100.00	439	13.94	

TABLE 2-17 GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES BY ENGINE MANUFACTURER/MODEL GROUP - CY 1980 (3 OF 3)

ENGINE MANUF/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR PERCENT ACTIVE	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
					CF
THECA AST3	46	0.00	100.00	366	12.52
THECA TURNC4	3	0.00	0.00	0	0.00
WASHER 165	31	27.46	21.67	29	7.65
WASHER 185	19	28.20	54.69	60	66.74
WASHER 250	53	14.34	27.99	29	19.09
WRIGHT J5	4	53.23	11.40	35	16.94
WRIGHT 760	64	21.91	63.34	61	11.35
WRIGHT 975	10	66.40	13.64	32	11.44
ALL ENGINES	239175	0.02	81.95	218	1.36

NOTE: ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH
SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT
LISTED IN THE TABLE, BUT ARE INCLUDED IN THE
"ALL ENGINES" ESTIMATES.

TABLE 2-18 GENERAL AVIATION FUEL CONSUMED BY TYPE OF AIRCRAFT - CY 1980

AIRCRAFT TYPE	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
FIXED WING			
PISTON			
1 ENG 1-3 SEATS	1.14	81.79	3.4
1 ENG 4+ SEATS	11.95	200.98	4.7
TOTAL 1 ENG	9.58	282.77	5.8
2 ENG 1-6 SEATS	26.30	98.11	4.6
2 ENG 7+ SEATS	21.22	14.38	5.4
TOTAL 2 ENG	31.6	113.09	7.1
OTHER PISTON	251.20	32.59	4.5
TOTAL PISTON	14.63	508.45	10.2
TURBOFOP			
2 ENG 1-12 SEATS	75.80	112.88	4.3
2 ENG 13+ SEATS	166.22	115.38	9.4
TOTAL 2 ENG	104.55	222.26	10.3
OTHE TURBOFOP	103.02	5.93	1.1
TOTAL TURBOFOP	104.51	234.07	10.4
TURBOJET			
2 ENG	201.91	330.25	15.8
OTHERS	191.62	133.91	22.1
TOTAL TURBOJET	355.26	473.06	27.2
TOTAL FIXED WING	311.72	1215.58	30.9
ROTARYCRAFT			
PISTON	14.75	10.85	1.1
TURBINE	36.51	58.52	4.6
TOTAL ROTARYCRAFT	21.62	63.33	4.7
OTHER	2.06	0.75	0.1
TOTAL AIRCRAFT	31.35	1285.71	311.2
TOTAL			
JET FUEL	147.98	765.65	29.5
TOTAL			
AVIATION GASOLINE	14.51	520.06	10.3

TABLE 2-19 NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS - CY 1980 (1 OF 2)

		1	2	3	4	5	6	7	8	TOTALS
L	ESTIMATE	98	364	5877	10861	2	7	0	280	18295
	STD ERR	*	33.8	7.9	6.0	*	*	22	37.6	4.4
	RJM %	0.5	2.0	32.1	55.4	0.0	0.0	1.5		
	COLUMN %	0.2	2.6	12.7	13.2	0.4	0.6	0.5	7.2	
L, MB	ESTIMATE	40	114	1173	10223	0	0	1192	1163	13906
	STD ERR	*	17.0	6.2	0.0	0.0	0.0	18.9	18.0	5.2
	RJM %	2.3	0.8	8.4	73.5	0.0	0.0	8.6	8.4	
	COLUMN %	0.1	0.8	2.5	12.5	0.0	0.0	8.0	2.1	5.4
L, MB, GS	ESTIMATE	35	355	1200	35211	406	445	11277	35871	88802
	STD ERR	*	32.3	18.1	3.0	33.9	27.1	5.9	2.4	1.3
	RJM %	0.7	0.4	1.4	39.7	0.5	0.5	12.7	44.9	
	COLUMN %	0.1	2.5	2.6	42.9	83.4	37.9	75.3	72.3	34.7
L, MB, GS, RA	ESTIMATE	3	2	120	799	17	181	427	13292	14842
	STD ERR	*	*	48.8	20.0	*	38.0	31.0	3.5	3.4
	RJM %	0.0	0.0	0.8	5.4	0.1	1.2	2.9	89.6	
	COLUMN %	0.0	0.0	0.3	1.0	3.5	15.4	2.9	24.1	5.8
LRN	ESTIMATE	30	45	54	465	0	2	199	3002	3836
	STD ERR	*	*	36.7	27.4	0.0	*	44.9	7.4	7.2
	RJM %	0.8	1.2	2.5	12.1	0.0	0.1	5.2	78.3	
	COLUMN %	0.1	0.3	0.2	0.6	0.0	0.2	1.3	5.4	1.5
RA	ESTIMATE	31	25	188	929	17	183	51.8	13517	15407
	STD ERR	*	34.1	40.0	19.1	*	37.6	27.5	3.5	3.3
	RJM %	0.2	0.2	1.2	6.0	0.1	1.2	3.4	87.7	
	COLUMN %	0.1	0.2	0.4	1.1	2.5	15.6	3.5	24.5	6.0
ML	ESTIMATE	25	0	47	263	0	2	4	476	817
	STD ERR	*	0.0	*	43.4	0.0	47.3	*	25.9	21.6
	RJM %	3.1	0.0	5.8	32.2	0.0	0.2	0.5	58.3	
	COLUMN %	0.1	0.0	0.1	0.3	0.0	0.2	0.0	0.9	0.3
L, MB, GS, ML	ESTIMATE	0	0	11	217	0	0	0	474	702
	STD ERR	0.0	0.0	*	47.0	0.0	0.0	0.0	26.0	23.0
	RJM %	0.0	0.0	1.6	30.9	0.0	0.0	0.0	67.5	
	COLUMN %	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.9	0.3

TABLE 2-19 NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS - CY 1980 (2 OF 2)

		1	2	3	4	5	6	7	8	TOTALS
TOP,PL	ESTIMATE	25	0	0	102	0	0	0	0	226
	± STD. ERR	*	0.0	0.0	*	0.0	0.0	0.0	0.0	353
	RJM %	7.1	0.0	0.0	28.9	0.0	0.0	0.0	0.0	33.3
	CJLJMN %	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
NO GPCUN	ESTIMATE	41149	13211	37926	24756	63	538	1189	349	119161
	± STD. ERR	1.8	4.2	2.6	3.8	*	25.7	16.9	33.2	0.9
	RJM %	34.5	11.1	31.8	20.8	C.1	0.5	1.0	0.3	46.6
	CJLJMN %	99.6	93.7	81.6	30.2	12.9	45.8	7.9	0.6	
ALL CRAFT	ESTIMATE	41333	14096	46454	82042	487	1175	14976	55127	255761
	± STD. ERR	1.8	4.1	2.2	1.6	25.8	16.7	5.0	1.7	
	RJM %	16.2	5.5	18.2	32.1	C.2	C.5	5.9	21.6	

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-20 HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1980 (1 OF 2)

		1	2	3	4	5	6	7	8	TOTALS
EXECUTIVE	ESTIMATE	150	323	575	2209	3	6	559	11658	15523
	2 STD ERR	18.6	31.9	26.3	12.7	*	*	25.2	3.5	3.6
	RJW %	1.7	2.1	3.7	14.2	0.0	0.0	3.6	75.1	
	COLUMN %	0.5	2.3	1.4	2.7	c.6	0.5	3.7	21.1	6.1
BUSINESS	ESTIMATE	1420	773	4170	19003	56	193	3519	21940	51076
	2 STD FPR	15.3	19.3	9.4	4.4	*	47.3	10.8	3.6	2.3
	RJW %	2.8	1.5	8.2	37.2	c.1	0.4	6.9	43.0	
	COLUMN %	3.4	5.5	9.0	22.2	11.5	16.4	23.5	35.8	20.0
PPPSCNAL	ESTIMATE	17722	6027	26813	35237	131	175	5996	10365	111475
	2 STD ERR	4.1	6.4	3.2	2.8	*	47.2	8.3	5.9	1.3
	RJW %	12.5	5.9	26.4	38.7	c.1	0.2	5.5	10.2	
	COLUMN %	30.8	42.8	57.7	47.8	26.9	14.9	40.0	18.8	39.7
AERIAL AP.	ESTIMATE	6077	659	189	602	5	34	98	206	7870
	2 STD ERR	4.0	20.3	39.0	22.0	*	*	*	39.4	3.7
	RJW %	77.2	8.4	2.4	7.6	c.1	0.4	1.2	2.6	
	COLUMN %	14.7	4.7	0.4	0.7	1.0	2.9	0.7	0.4	3.1
INSTRUCT.	ESTIMATE	636	553	3751	8263	0	61	1112	1127	15502
	2 STD FPR	17.8	21.7	10.8	7.0	0.0	*	21.3	18.7	4.8
	RJW %	4.1	3.6	24.2	53.3	c.0	0.4	7.2	7.3	
	COLUMN %	1.5	3.9	6.1	10.1	0.0	5.2	7.4	2.0	6.1
COMPUTER	ESTIMATE	2	11	18	288	0	25	82	593	1020
	2 STD FPR	*	*	*	25.9	0.0	*	*	18.7	14.0
	RJW %	0.2	1.1	1.8	28.2	c.0	2.5	8.0	58.1	
	COLUMN %	0.0	0.1	0.0	0.4	0.0	2.1	0.5	1.1	0.4
AIR TAXI	ESTIMATE	10	1717	160	1149	0	520	599	3914	8069
	2 STD FPR	*	13.5	38.1	18.2	0.0	23.7	27.1	8.9	6.1
	RJW %	0.1	21.3	2.0	14.2	c.0	6.4	7.4	48.5	
	COLUMN %	0.0	12.2	0.3	1.4	0.0	44.3	4.0	7.1	3.2
INDSTR SO	ESTIMATE	24	537	555	892	0	45	332	593	3018
	2 STD ERR	*	19.3	24.9	20.8	c.0	*	34.6	25.4	10.5
	RJW %	0.9	17.8	19.7	29.6	c.0	1.5	11.0	19.6	
	COLUMN %	0.1	3.8	1.3	1.1	c.0	3.8	2.2	1.1	1.2

TABLE 2-20 HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1980 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
RENTAL									
ESTIMATE	286	321	1521	5414	135	0	1837	2745	12260
STD ERR	34.3	32.0	17.6	9.2	*	0.0	16.2	12.0	5.8
RJW %	2.3	2.6	12.4	44.2	1.1	0.0	15.0	22.4	
COLUMN %	0.7	2.3	3.3	6.6	27.7	0.0	12.3	5.0	4.8
OFFER									
ESTIMATE	620	885	812	1485	8	50	350	1369	5579
STD ERR	22.4	17.3	19.3	16.2	31.9	*	32.0	13.0	7.3
RJW %	11.1	15.9	14.6	26.6	0.1	0.9	6.3	24.5	
COLUMN %	1.5	6.3	1.7	1.8	1.6	4.3	2.3	2.5	2.2
INACTIVE									
ESTIMATE	19441	2374	7658	3631	158	52	482	826	34622
STD ERR	3.3	10.9	6.3	9.6	47.4	*	26.6	17.5	2.5
RJW %	56.2	6.9	22.1	10.5	0.5	0.2	1.4	2.4	
COLUMN %	47.0	16.8	16.5	4.4	32.4	4.4	3.2	1.5	13.5
TOTALS									
ESTIMATE	41331	14096	46454	82042	487	1175	14976	55127	255761
STD ERR	1.3	4.1	2.2	1.6	25.8	16.7	5.0	1.7	
RJW %	16.2	5.5	18.2	32.1	C.2	C.5	5.5	21.6	

KEY

GROUP	GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS	10. TWO-SYSTEMS - AIR TAXIS
2. TWO-WAY COMMUNICATIONS	4C96 CODE TRANSPONDER	4C96 CODE TRANSPONDER	4096 CODE TRANSPONDER
3. TWO-WAY COMMUNICATIONS	VCR OR RNAV	ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
TWO SYSTEMS - AIR TAXIS	4C96 CODE TRANSPONDER	4C96 CODE TRANSPONDER	4096 CODE TRANSPONDER
VCR OR ADF OR RNAV	ALTITUDE ENCODING EQUIPMENT	VCR OR RNAV	CME
6. TWO-WAY COMMUNICATIONS	4C96 CODE TRANSPONDER	4C96 CODE TRANSPONDER	4096 CODE TRANSPONDER
	ALTITUDE ENCODING EQUIPMENT	VCR OR RNAV	CME

NOTE : FCWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-21 HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1980 (1 OF 2)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 |
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TABLE 2-21 HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1980 (2 OF 2)

		1	2	3	4	5	6	7	8	TOTALS
400-440	ESTIMATE	407	363	443	1644	0	23	603	2519	6003
	STD ERR	29.1	32.6	30.4	17.0	C.0	*	28.4	11.1	8.0
	ROW %	6.8	6.0	7.4	27.4	C.0	0.4	10.0	42.0	4.6
COLUMN %		1.7	2.6	1.0	2.0	0.0	2.0	4.0		2.3
	ESTIMATE	1646	1747	2172	7323	1	367	1675	8298	23228
	STD ERR	13.8	12.7	14.1	7.7	*	26.6	16.3	5.5	3.7
450-14P	ROW %	7.1	7.5	9.4	31.5	0.0	1.6	7.2	35.7	
	COLUMN %	4.0	12.4	4.7	8.9	0.2	31.2	11.2	15.1	9.1
INACTIVE	ESTIMATE	19441	2374	7658	3631	158	52	482	826	34622
	STD ERR	3.3	10.9	6.3	9.6	47.6	*	26.6	17.9	2.5
	ROW %	56.2	6.9	22.1	10.5	0.5	0.2	1.4	2.4	
COLUMN %		47.0	16.8	16.5	4.4	32.4	4.4	3.2	1.5	13.5
	ESTIMATE	41333	14396	46454	62042	487	1175	14976	55127	255761
	STD ERR	1.8	4.1	2.2	1.6	25.8	16.7	5.0	1.7	
TOTALS	ROW %	16.2	5.5	18.2	32.1	C.2	0.5	5.9	21.6	

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	5. TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4C96 CODE TRANSPONDER VCR OR RNAV
TWO SYSTEMS - AIR TAXIS	4C96 CODE TRANSPONDER VCR OR ADF OR RNAV
TWO SYSTEMS - AIR TAXIS	4C96 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT
6.	6. TWO-WAY COMMUNICATIONS
	4C96 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT

7. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

8. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT
4096 CODE TRANSPONDER
VOR OR RNAV
DME

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-22 HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1980
(1 OF 2)

		1	2	3	4	5	6	7	8	TOTALS
0-4 yrs	ESTIMATE	5487	3438	4964	17183	267	422	6437	22932	61229
	2 STD ERR	7.1	9.3	9.4	4.7	36.9	29.3	8.4	3.4	2.1
	ROW %	9.0	5.6	8.1	28.1	C.6	C.7	10.5	37.5	
	COLUMN %	13.3	24.4	10.7	20.9	75.4	35.5	43.0	41.6	23.5
5-9 yrs	ESTIMATE	6307	2519	6202	16129	10	315	2178	12682	46142
	2 STD ERR	6.4	11.5	8.3	5.0	*	37.0	14.3	5.0	2.6
	ROW %	13.7	5.5	13.4	35.0	C.0	0.7	4.7	27.1	
	COLUMN %	15.3	17.9	13.4	15.7	2.1	26.8	14.5	22.6	18.0
10-14 yrs	ESTIMATE	3907	2076	8576	19361	47	263	1991	16112	46333
	2 STD ERR	9.5	12.5	6.9	4.4	*	37.0	14.5	5.3	2.6
	ROW %	8.4	4.5	18.5	41.8	C.1	0.6	4.3	21.8	
	COLUMN %	9.5	14.7	18.5	23.6	5.7	22.4	13.3	18.3	18.1
15-19 yrs	ESTIMATE	2955	1580	5867	13243	33	145	1691	5370	31184
	2 STD ERR	11.3	13.4	8.3	5.6	*	*	14.4	8.1	3.3
	ROW %	9.5	5.1	18.8	42.5	C.1	C.5	6.4	17.2	
	COLUMN %	7.1	11.2	12.6	16.1	6.8	12.3	13.3	9.7	12.2
20-24 yrs	ESTIMATE	2221	871	6262	8740	12	24	1276	2557	21942
	2 STD ERR	12.8	20.4	7.4	6.4	42.1	*	18.0	11.5	3.7
	ROW %	10.1	4.0	28.5	39.8	C.1	0.1	5.8	11.6	
	COLUMN %	5.4	6.2	13.5	10.7	2.5	2.0	8.5	4.6	8.6
25-29 yrs	ESTIMATE	1305	915	4135	3247	9	3	365	492	10476
	2 STD ERR	14.7	16.5	7.4	9.3	*	*	27.0	18.6	4.3
	ROW %	12.5	8.7	39.5	31.0	C.1	0.6	3.5	4.7	
	COLUMN %	3.2	6.5	8.9	4.0	1.8	0.3	2.5	0.5	4.1
30-34 yrs	ESTIMATE	11909	1962	9727	2256	2	16	405	359	26835
	2 STD ERR	4.1	11.7	4.0	8.5	*	*	23.9	27.5	1.8
	ROW %	41.0	7.3	36.2	12.5	C.0	0.1	1.5	1.3	
	COLUMN %	26.6	13.9	20.9	4.1	C.4	1.4	2.7	C.7	10.5
35+ yrs	ESTIMATE	7405	1165	1290	1113	2	6	155	408	11544
	2 STD ERR	4.5	16.1	13.1	13.3	*	29.1	47.9	16.5	3.1
	ROW %	64.1	10.1	11.2	5.6	C.0	0.1	1.3	3.5	
	COLUMN %	17.9	8.3	2.8	1.4	0.4	0.5	1.0	C.7	4.5

TABLE 2-22 HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1980
(2 OF 2)

TOTALS	TOTALS							
	1	2	3	4	5	6	7	8
ESTIMATE	41333	14096	46454	82042	487	1175	14976	55127
STD EPR	1.8	4.1	2.2	1.6	25.8	16.7	5.0	1.7
POW *	16.2	5.5	18.2	32.1	C.2	0.5	5.9	21.6

KEY

GROUP	GROUP	GROUP	GROUP
1. NC REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS
	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
	4C96 CODE TRANSPONDER	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
	VOR OR RNAV	ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
2. TWO-WAY COMMUNICATIONS			
3. TWO-WAY COMMUNICATIONS	5. TWO SYSTEMS - AIR TAXIS	8. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
	4C96 CODE TRANSPONDER	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
	ALTITUDE ENCODING EQUIPMENT	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
	VOR OR ADF OR RNAV	ALTITUDE ENCODING EQUIPMENT	VOR OR RNAV
			4096 CODE TRANSPONDER
			ALTITUDE ENCODING EQUIPMENT
			CME

NCTF : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-23 HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1980 (1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
TYPE 1	ESTIMATE * STD FPP	31339 2.0	5701 7.6	28628 2.8	17711 3.8	82 *	173 48.5	1056 15.0	334 26.7
	RJW 3	36.9	6.7	33.7	20.8	C.1	C.2	1.2	0.0
	CULJMA 2	75.8	40.4	61.6	21.6	16.4	14.7	7.1	0.4
									33.2
TYPE 2	ESTIMATE * STD FPP	2961 9.1	2154 2.5	15582 1.8	51625 13.4	293 48.4	283 C.2	12244 C.2	27523 10.3
	RJW 2	2.5	1.8	3.9	1.9	41.7	35.3	5.7	3.0
	CULJMA 2	7.2	15.3	34.4	70.2	66.2	24.1	81.8	0.0
									46.6
TYPE 3	ESTIMATE * STD FPP	282 22.8	127 *	420 27.7	3375 2.3	0 0.0	236 C.0	1003 1.3	13076 37.9
	RJW 2	1.5	0.7	2.1	16.2	0.9	4.1	20.1	2.7
	CULJMA 2	3.7	0.9	0.9	4.1	0.0	0.0	6.7	0.0
									7.2
TYPE 4	ESTIMATE * STD FPP	419 27.6	158 49.3	213 1.6	1478 2.2	94 15.2	160 1.0	463 1.6	6716 44.4
	RJW 2	4.3	1.1	32.8	11.9	48.5	44.4	26.8	2.5
	CULJMA 2	1.0	1.1	0.5	1.8	15.3	13.6	3.1	0.0
									3.8
TYPE 5	ESTIMATE * STD EPP	28 33.3	11 39.1	25 31.5	148 1C.3	0 C.0	0 C.0	14 0.0	158 2.7
	RJW 2	7.1	2.5	6.5	38.6	0.2	0.2	0.0	69.2
	CULJMA 2	7.1	0.1	0.1	0.1	0.0	0.0	0.1	12.2
									0.0
TYPE 6	ESTIMATE * STD EPP	42 1.2	1 0.0	2 0.1	54 0.1	0 1.6	0 C.0	79 C.0	7 *
	RJW 2	0.1	3.0	0.0	0.0	0.1	0.0	0.0	1.8
	CULJMA 2								0.0
									1.3
TYPE 7	ESTIMATE * STD FPP	4 0.5	3 0.4	23 3.4	64 2.0	1 0.4	40 0.1	24 32.9	523 3.5
	RJW 2	0.1	0.3	0.0	0.0	0.1	0.0	0.0	6.1
	CULJMA 2								5.9
									0.3
TYPE 8	ESTIMATE * STD EPP	62 41.7	16 10.6	6 4.0	15 0.1	0 0.9	2 C.0	0 1.3	151 0.0
	RJW 2	9.2	0.1	0.1	0.1	0.0	0.0	0.0	32.5
	CULJMA 2								0.1

TABLE 2-23 HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

TYPE	GROUP	1	2	3	4	5	6	7	8	9	TOTALS
TYPE 0	ESTIMATE	3	0	0	41	33	0	2	17	2578	2674
	% STD FOR	*	0.0	40.0	49.6	0.0	*	*	1.0	1.0	C.C.
	FOR %	0.1	0.0	1.5	1.2	0.0	0.1	0.6	96.4	96.4	
	COLUMNS	0.0	0.0	0.1	0.0	0.0	0.2	0.1	4.7	4.7	1.0
TYPE 1.1	ESTIMATE	91	18	29	191	13	0	3	388	718	
	% STD FOR	12.5	20.7	21.5	23.3	29.0	0.0	*	11.6	0.0	
	FOR %	11.3	2.5	4.0	26.6	1.4	0.0	0.4	54.0	54.0	
	COLUMNS	0.2	0.1	0.1	0.2	2.1	0.0	0.0	0.7	0.7	0.3
TYPE 1.1	ESTIMATE	2611	2093	378	225	9	114	13	13	5456	
	% STD FOR	5.2	6.8	20.0	21.6	*	45.6	*	*	0.0	
	FOR %	47.9	38.4	6.9	4.1	0.1	2.1	0.2	0.2	0.2	
	COLUMNS	6.3	14.8	0.8	0.3	1.6	5.7	0.1	0.0	0.0	2.1
TYPE 1.2	ESTIMATE	140	1008	588	1112	2	5	133	511	3499	
	% STD FOR	29.8	14.3	20.5	14.0	*	*	48.6	20.7	20.7	C.C.
	FOR %	4.0	28.9	16.8	31.8	0.1	0.1	3.8	14.6	14.6	
	COLUMNS	0.3	7.2	1.3	1.4	0.4	0.4	0.9	0.9	0.9	1.4
TYPE 1.3	ESTIMATE	3360	2807	109	10	0	0	0	0	3	6365
	% STD FOR	5.1	6.0	*	*	0.0	43.8	0.0	*	0.0	
	FOR %	52.8	44.1	1.7	0.2	0.0	1.3	0.0	0.0	0.0	
	COLUMNS	9.1	19.9	0.2	0.0	0.0	6.9	0.0	0.0	0.0	2.5
RAFT	ESTIMATE	41333	14096	66656	82042	487	1175	14576	55127	255761	
	% STD FOR	1.8	4.1	2.2	1.6	25.8	16.7	5.0	1.7	1.7	
	FOR %	16.2	5.5	18.7	32.1	0.2	0.5	0.5	0.5	0.5	21.6

KEY

GROUP

1. NO REGULATORY AVIONICS
2. TWO-WAY COMMUNICATIONS
3. TWO-WAY COMMUNICATIONS
TAC SYSTEMS - AIR TAXIS
VOR IN ADF OR RNAV
4. TWO-WAY COMMUNICATIONS
TAC SYSTEMS - AIR TAXIS
VOR IN ADF OR RNAV
5. 4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT
6. 4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

GROUP

7. TWO-WAY COMMUNICATIONS
TAC SYSTEMS - AIR TAXIS
4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT
8. TWO-WAY COMMUNICATIONS
TAC SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT
4096 CODE TRANSPONDER
VOR OR RNAV
DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD, EPPCR GREATER THAN 50 PERCENT.

TABLE 2-24 HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1980 (1 OF 2)

		1	2	3	4	5	6	7	8	TOTALS
NEW ENGLAND	ESTIMATE	4457	1127	5224	8257	4	203	2311	6717	26395
	% STD ERR	8.4	16.7	8.7	7.2	*	38.1	14.2	7.3	3.6
	RJM %	15.7	4.0	18.7	29.1	C.0	0.7	8.1	23.7	
	GULJMN %	10.8	8.0	11.5	1C.1	C.8	17.3	15.4	12.2	11.1
EASTERN	ESTIMATE	6859	1687	6138	1,418	128	95	1355	9891	26575
	% STD ERR	6.7	13.3	8.2	6.5	*	*	17.7	5.7	3.1
	RJM %	18.8	4.6	16.8	28.5	C.3	C.3	3.7	27.0	
	GULJMN %	16.6	12.0	13.2	12.7	26.3	8.1	9.1	17.9	14.3
SOUTHERN	ESTIMATE	3130	661	2717	5964	15	27	735	3057	16350
	% STD ERR	10.7	24.4	12.6	6.8	*	*	25.6	11.1	5.0
	RJM %	19.1	4.0	16.6	36.5	C.1	0.2	4.5	18.9	
	GULJMN %	7.6	4.7	5.8	7.3	3.1	2.3	4.5	5.6	6.4
GREAT LAKES	ESTIMATE	6057	2523	6636	14423	124	159	4440	9807	44209
	% STD ERR	7.3	10.1	7.6	5.4	*	40.0	16.0	6.0	2.0
	RJM %	13.7	5.7	15.0	22.6	C.3	0.5	10.0	22.2	
	GULJMN %	14.7	17.9	14.3	17.6	25.5	16.9	25.6	17.8	17.3
CENTRAL	ESTIMATE	608	1417	4158	1065	0	55	11	191	7545
	% STD ERR	23.0	15.1	8.9	18.0	0.0	*	*	37.4	6.4
	RJM %	8.1	18.8	55.1	14.1	C.0	1.3	0.1	2.5	
	GULJMN %	1.5	10.1	9.0	1.3	C.0	6.1	C.1	6.3	3.0
ROCKY MTS	ESTIMATE	32	79	34	398	0	2	13	57	614
	% STD ERR	*	*	*	31.9	C.0	*	*	*	24.7
	RJM %	5.2	12.9	5.5	64.8	C.0	0.3	2.1	5.3	
	GULJMN %	0.1	0.6	0.1	0.5	C.0	C.2	C.1	C.1	0.2
NORTHWEST	ESTIMATE	5627	1520	5365	11289	116	149	2569	8824	35476
	% STD ERR	7.9	14.6	8.8	6.2	*	41.8	13.7	6.1	3.2
	RJM %	15.9	4.3	15.2	31.8	C.3	0.4	7.2	24.5	
	GULJMN %	13.6	10.8	11.6	13.8	22.8	12.7	17.2	16.0	13.9
WESTERN	ESTIMATE	*	31	13	35	0	0	1	249	394
	% STD ERR	46.8	*	*	*	C.0	0.0	*	32.2	6.1
	RJM %	2.0	7.8	18.4	8.8	C.0	C.0	0.3	62.7	
	GULJMN %	0.0	0.2	0.2	0.0	C.0	C.0	0.0	0.5	0.2

TABLE 2-24 HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1980 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
SOUTHWEST	ESTIMATE	7447	2524	HC27	15450	80	335	2450	8908
	2 STD EPP	6.4	11.7	7.0	5.2	*	35.5	13.5	6.1
	RJW *	16.5	5.6	17.8	34.2	0.7	5.4	19.7	2.7
CULJMN *	CULJMN *	18.0	17.9	17.3	18.8	16.4	28.5	16.4	17.7
	ESTIMATE	2677	523	2559	4534	2	70	447	2716
	2 STD EPP	12.1	19.2	12.7	5.7	*	*	32.6	11.8
PACIFIC	RJW *	18.7	6.4	17.9	34.5	0.0	0.5	3.1	5.3
	CULJMN *	6.5	6.5	5.5	6.0	0.4	6.0	3.0	6.9
	ESTIMATE	1493	432	1936	2896	2	11	506	1836
ALASKAN	2 STD EPP	15.3	24.4	14.6	12.4	*	*	30.0	14.6
	RJW *	16.3	4.7	21.3	31.8	0.0	0.1	5.6	6.6
	CULJMN *	3.6	3.1	4.2	3.5	0.4	0.9	3.4	3.6
FOREIGN	ESTIMATE	2676	1384	3478	6070	0	38	455	3340
	2 STD EPP	11.3	14.3	10.7	8.5	0.0	*	29.7	10.8
	RJW *	15.3	7.9	19.9	34.7	0.0	0.2	2.9	19.1
CULJMN *	CULJMN *	6.5	5.8	7.5	7.4	0.0	3.2	3.3	6.8
	ESTIMATE	41333	14096	46454	82042	497	1175	14976	55127
	2 STD FRR	1.8	4.1	2.2	1.6	29.9	16.7	5.0	1.7
TOTALS	RJW *	16.2	5.5	18.2	32.1	0.5	0.5	5.5	21.6

KEY

GROUP

GROUP

KEY

GROUP

GROUP

GROUP

1. NO REGULATORY AVIONICS

4.

7. TWO-WAY COMMUNICATIONS

TAC SYSTEMS - AIR TAXIS

2. TWO-WAY COMMUNICATIONS

4C96

COCE TRANSPONDER

3. TWO-WAY COMMUNICATIONS

VCR OR PNAV

4. TWO SYSTEMS - AIR TAXIS

4C96 CODE TRANSPONDER

5. ALTITUDE ENCODING EQUIPMENT

VOR OR ADF OR RNAV

6. TWO-WAY COMMUNICATIONS

4C96 COCE TRANSPONDER

7. ALTITUDE ENCODING EQUIPMENT

VCR OR RNAV

CME

8. TWO-WAY COMMUNICATIONS

TWO SYSTEMS - AIR TAXIS

ALTITUDE ENCODING EQUIPMENT

4096 COCE TRANSPONDER

VCR

UR RNAV

CME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTFC TOTALS DUE TO ESTIMATION PROCEDURES.

* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-25 NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1980
(1 OF 2)

	L	L, MB, GS	L, MB, GS	L, MB, GS, RA	LRN	RA	PL	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
EXECUTIVE	ESTIMATE	598	465	583	7151	2069	7288	295	248	154	1405
	1 STD ERR	26.0	28.1	7.2	6.4	4.3	37.2	38.9	48.8	16.3	15523
	ROW %	3.9	3.0	37.9	46.1	1.3	46.9	1.9	1.6	1.0	3.6
	COLUMN %	3.3	3.3	6.6	48.2	52.9	47.3	36.1	35.3	43.6	9.1
BUSINESS	ESTIMATE	2215	3067	30815	3935	551	4134	43	39	11	10793
	1 STD ERR	13.8	11.4	3.1	6.9	24.0	8.7	*	*	*	51076
	ROW %	4.2	6.0	60.4	77.7	1.1	8.1	0.1	0.1	0.0	2.3
	COLUMN %	12.1	22.1	34.8	26.5	14.4	26.8	5.3	5.6	3.1	21.1
											20.0
PERSONAL	ESTIMATE	8175	7468	29046	1133	447	1261	351	291	147	55369
	1 STD ERR	6.9	7.3	3.4	18.9	31.6	18.1	35.2	39.3	*	1.9
	ROW %	8.1	7.4	28.6	1.1	0.4	1.2	0.3	0.3	0.1	54.6
	COLUMN %	44.7	53.7	32.7	7.6	11.7	8.2	43.0	41.5	41.6	46.5
AERIAL AP.	ESTIMATE	330	4	396	0	0	0	0	0	0	7139
	1 STD ERR	33.3	*	26.8	0.0	*	0.0	0.0	0.0	0.0	3.6
	ROW %	4.2	0.1	5.0	0.0	0.1	0.0	0.0	0.0	0.0	90.7
	COLUMN %	1.8	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	6.0
											3.1
INSTRUCT.	ESTIMATE	3296	804	4559	242	4	242	78	78	2	6601
	1 STD ERR	11.6	24.6	9.9	40.6	*	40.6	*	*	*	15502
	ROW %	21.3	5.2	29.4	1.6	0.0	1.6	0.5	0.5	0.0	42.6
	COLUMN %	18.0	5.8	5.1	1.6	0.1	1.6	0.5	0.5	0.6	5.5
											6.1
COMPUTER	ESTIMATE	11	0	700	285	27	285	4	4	0	23
	1 STD ERR	20.0	0.0	16.8	29.4	*	29.4	*	*	0.0	44.0
	ROW %	1.1	0.0	68.6	27.9	2.6	27.9	0.4	0.4	0.0	14.0
	COLUMN %	0.1	0.0	0.8	1.9	0.7	1.8	0.5	0.6	0.0	0.4
AIR TAXI	ESTIMATE	405	212	5401	908	276	912	36	36	36	1110
	1 STD ERR	31.5	39.6	7.9	16.4	30.0	14.3	*	*	15.5	6.1
	ROW %	5.0	2.6	66.9	11.3	2.4	11.3	0.4	0.4	0.4	13.8
	COLUMN %	2.2	1.5	6.1	6.1	7.2	5.9	4.4	5.1	10.2	0.9
											3.2
INDUSTR SP	ESTIMATE	286	76	1034	190	43	203	0	0	0	1424
	1 STD ERR	31.9	*	19.8	40.2	*	37.9	0.0	0.0	0.0	3018
	ROW %	9.5	2.5	34.3	6.3	1.4	6.7	0.0	0.0	0.0	14.8
	COLUMN %	1.6	0.5	1.2	1.2	1.1	1.3	0.0	0.0	0.0	47.2
											1.2

TABLE 2-25 NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1980
(2 OF 2)

	L	L+MB	L+MB, GS	L+MB, GS,RA	LBN	RA	ML	L+MB, GS,ML	LBN,ML	NC GROUP	ALL CRAFT
RFNTAL	920	574	7381	253	55	253	1	1	0	3116	12260
ESTIMATE	22.7	28.3	7.7	34.1	34.7	34.1	*	0.0	0.0	11.9	5.8
STD ERR	7.5	4.7	60.2	2.1	0.4	2.1	0.0	0.0	0.0	25.4	
ROW 3	5.0	4.1	8.3	1.7	1.4	1.6	0.1	0.1	0.0	2.6	4.8
COLUMN 2											
ESTIMATE	386	189	1566	572	197	562	10	10	7	2865	5579
STD ERR	30.4	41.8	14.8	17.8	25.2	17.2	*	*	*	10.1	7.3
ROW 2	6.9	3.4	28.1	10.3	3.5	10.6	0.2	0.2	0.1	51.4	
COLUMN 2	2.1	1.4	1.8	3.9	5.1	3.8	1.2	1.4	2.0	2.4	2.2
ESTIMATE	1626	1052	2110	254	152	251	10	4	4	29488	34622
STD ERR	13.9	18.4	11.8	23.2	24.5	22.2	*	*	*	2.7	2.5
ROW 3	4.7	3.0	6.1	C.7	C.4	0.8	0.0	0.0	0.0	85.2	
COLUMN 2	8.9	7.6	2.4	1.7	4.0	1.9	1.2	0.6	1.1	24.7	13.5
ESTIMATE	18295	13906	88802	14842	3836	15407	817	702	353	119101	255761
STD ERR	4.4	5.2	1.3	3.4	7.2	3.3	21.6	23.0	33.3	C.9	
ROW 2	7.2	5.4	34.7	5.8	1.5	6.0	0.3	0.3	0.1	46.6	

KEY

GROUP

L: LOCALIZER RA: RACAR ALTIMETER

MB: MARKER BEACON

LBN: LONG RANGE RNAV

GS: GLIDE SLOPE

ML: MICROWAVE LANDING SYSTEM

NOTE : RCWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-26 NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1980
(1 OF 2)

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LEN, ML	NO GROUP	ALL CRAFT
1-49	ESTIMATE	3837	2822	8855	619	280	726	93	92	22	33173 49625
	± STD ERR	10.0	11.9	6.5	22.8	36.8	21.6	*	*	*	2.9 2.4
	ROW %	7.7	5.7	17.9	1.2	6.6	1.5	0.2	0.0	0.0	66.8
	COLUMN %	21.0	20.3	10.0	4.2	7.3	4.7	11.4	13.1	6.2	27.8 19.4
50-99	ESTIMATE	3449	3624	15163	1179	282	1247	19	13	5	21589 45017
	± STD ERR	10.6	10.6	4.9	16.9	30.8	16.5	*	*	*	4.0 2.7
	ROW %	7.7	8.1	33.7	2.6	0.6	2.8	0.0	0.0	0.0	48.0
	COLUMN %	18.9	26.1	17.1	7.9	7.4	8.1	2.3	1.9	1.4	16.1 17.6
100-149	ESTIMATE	2851	2341	16788	1733	492	1801	216	183	181	11390 35182
	± STD ERR	12.4	13.4	4.7	14.1	28.3	13.9	46.6	*	*	5.7 3.1
	ROW %	8.1	6.7	47.7	4.9	1.4	5.1	0.6	0.5	0.5	32.4
	COLUMN %	15.6	16.8	18.9	11.7	12.8	11.7	26.4	26.1	51.3	5.6 13.6
150-199	ESTIMATE	1098	1061	10824	1167	272	1168	88	88	88	5083 19275
	± STD ERR	19.7	20.1	5.9	5.9	31.0	16.0	*	*	*	8.8 4.4
	ROW %	5.7	5.5	56.2	6.0	1.4	6.1	0.5	0.5	0.0	26.4
	COLUMN %	6.0	7.6	12.2	7.9	7.1	7.6	10.8	12.5	2.3	4.3 7.5
200-249	ESTIMATE	1158	814	9254	1477	435	1526	124	52	40	4005 16772
	± STD ERR	19.9	22.3	6.5	13.8	26.4	13.6	*	*	*	10.0 4.7
	ROW %	6.9	4.9	55.2	8.8	2.6	9.2	0.7	0.3	0.2	23.9
	COLUMN %	6.3	5.9	10.4	10.0	11.3	10.0	15.2	7.4	11.3	3.4 6.6
250-299	ESTIMATE	705	472	5983	1260	136	1308	116	116	0	1960 10379
	± STD ERR	24.7	30.2	8.3	15.5	34.0	15.1	*	*	0.0	14.0 6.1
	ROW %	6.8	4.5	57.6	12.1	1.3	12.6	1.1	1.1	0.0	18.9
	COLUMN %	3.9	3.4	6.7	8.5	3.5	8.5	14.2	16.5	0.0	1.6 4.1
300-349	ESTIMATE	668	321	4729	1520	223	1528	35	35	0	2391 9629
	± STD ERR	26.4	36.4	9.2	12.9	21.3	12.9	*	*	0.0	12.9 6.2
	ROW %	6.9	3.3	49.1	15.8	2.3	15.9	0.4	0.4	0.0	24.8
	COLUMN %	3.7	2.3	5.3	10.2	5.8	9.9	4.3	5.0	0.0	2.0 3.8
350-399	ESTIMATE	586	154	29C9	1C27	186	1062	37	37	35	1283 5959
	± STD EPR	29.0	*	11.8	13.7	28.4	13.7	*	*	*	17.8 7.9
	ROW %	9.8	2.6	48.8	17.2	3.1	17.8	0.6	0.6	0.6	21.5
	COLUMN %	3.2	1.1	3.3	6.9	4.8	6.9	4.5	5.3	5.5	1.1 2.3

TABLE 2-26 NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1980
(2 OF 2)

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
400-449	ESTIMATE	276	201	2887	589	240	989	3	0	1650	6003
	1 STD ERR	40.7	48.8	11.9	14.4	26.9	16.4	49.2	0.0	16.0	8.0
ROW %		4.6	3.3	48.1	16.5	4.0	16.5	0.0	0.0	27.5	
COLUMN %		1.5	1.4	3.3	6.7	6.3	6.4	0.4	0.4	1.4	2.3
450 UP	ESTIMATE	1971	1039	9364	3698	1129	3805	87	87	7081	23228
	1 STD ERR	15.0	20.7	6.3	6.5	11.0	6.5	6.4	6.4	7.2	3.7
ROW %		8.5	4.5	40.3	15.9	4.9	16.6	0.4	0.4	30.5	
COLUMN %		10.8	7.5	10.5	24.9	25.4	24.7	10.6	12.4	19.3	9.1
INACTIVE	ESTIMATE	1626	1052	2110	254	152	251	10	4	29488	34622
	1 STD ERR	13.9	18.4	11.8	23.2	24.5	22.2	6	6	2.7	2.5
ROW %		4.7	3.0	6.1	0.7	0.4	0.8	0.0	0.0	85.2	
COLUMN %		8.9	7.6	2.4	1.7	4.0	1.9	1.2	1.1	24.7	13.5
TOTALS	ESTIMATE	19295	13906	88802	14842	3836	15467	817	7C2	119181	255761
	1 STD ERR	4.4	5.2	1.3	3.4	7.2	3.3	21.6	23.0	33.3	C.5
ROW %		7.2	5.4	34.7	5.8	1.5	6.0	C.3	C.3	0.1	46.6

KEY

GROUP

L: LOCALIZER

GROUP

RA: RADAR ALTIMETER

MB: MARKER BEACON

LRN: LONG RANGE RNAV

GS: GLIDE SLOPE

ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-27 NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1980
(1 OF 2)

		L	L, MB	L, MB, GS	L, MB, GS, RA	L, RA	RA	ML	L, MB, GS, ML	LRA, ML	NO GROUP	ALL CRAFT
0-4 yrs	ESTIMATE	4483	1481	30595	6546	1477	6745	209	161	55	17981	61226
	1 STD ERR	9.9	17.1	3.2	5.9	12.6	5.8	42.6	44.6	4	4.2	2.1
	ROW 2	7.3	2.4	50.0	10.7	2.4	11.0	0.3	0.3	0.1	26.4	
	COLUMN 3	24.5	10.7	34.5	44.1	38.5	43.8	25.6	22.9	15.6	15.1	23.9
5-9 yrs	ESTIMATE	2840	1919	18345	3347	762	3402	146	146	7	19602	46142
	1 STD ERR	12.7	15.1	4.5	8.6	19.3	8.5	8	8	0	4.1	2.6
	ROW 2	6.2	4.2	39.8	7.3	1.7	7.4	0.3	0.3	0.0	42.5	
	COLUMN 3	15.5	13.6	20.7	22.6	15.9	22.1	17.9	20.8	2.0	16.4	18.0
10-14 yrs	ESTIMATE	3248	3591	17566	3316	639	3496	358	323	181	18353	46333
	1 STD ERR	11.8	10.8	4.5	8.8	18.3	8.7	33.8	36.0	47.6	4.5	2.6
	ROW 2	7.0	7.6	37.9	7.2	1.4	7.5	0.6	0.7	0.4	35.6	
	COLUMN 3	17.8	25.8	19.8	22.3	16.7	22.7	43.8	46.0	51.3	15.4	18.1
15-19 yrs	ESTIMATE	2309	3662	10565	831	405	857	30	27	24	13294	31184
	1 STD ERR	13.8	10.9	5.8	18.2	23.2	17.9	8	8	0	5.3	3.3
	ROW 2	7.4	11.7	35.2	2.7	1.3	2.7	0.1	0.1	0.1	42.6	
	COLUMN 3	12.6	26.3	12.3	5.6	10.6	5.6	3.7	3.8	6.8	11.2	12.2
20-24 yrs	ESTIMATE	2237	1729	6456	447	212	474	110	85	106	11028	21942
	1 STD ERR	13.3	15.4	7.2	23.5	37.7	23.4	8	8	8	5.5	3.7
	ROW 2	10.2	7.9	29.6	2.0	1.0	2.2	0.5	0.4	0.5	50.3	
	COLUMN 3	12.2	12.4	7.3	3.0	5.5	3.1	13.5	12.1	30.0	9.3	8.6
25-29 yrs	ESTIMATE	922	912	1863	67	22	69	3	3	3	6710	10476
	1 STD ERR	17.1	19.0	11.7	25.1	8	25.0	8	8	8	5.7	4.3
	ROW 2	8.0	8.7	17.8	0.6	6.2	0.7	0.0	0.0	0.0	64.1	
	COLUMN 3	5.0	6.6	2.1	0.5	0.6	0.4	0.4	0.4	0.8	5.6	4.1
30-34 yrs	ESTIMATE	1818	761	1408	46	18	91	24	19	11	22750	26635
	1 STD ERR	12.4	19.4	12.4	44.1	8	48.5	46.9	31.1	39.1	2.2	1.8
	ROW 2	6.8	2.8	5.2	0.2	6.1	0.3	0.1	0.1	0.0	84.8	
	COLUMN 3	9.9	5.5	1.6	0.3	0.5	0.6	2.9	2.7	3.1	19.1	10.5
35+ yrs	ESTIMATE	414	149	1066	150	94	152	17	16	5	9747	11564
	1 STD ERR	16.2	32.6	13.1	34.6	8	34.1	8	33.0	33.0	3.6	3.1
	ROW 2	3.6	1.3	9.2	1.3	0.5	1.3	0.1	0.1	0.0	84.4	
	COLUMN 3	2.3	1.1	1.2	1.0	1.4	1.0	2.1	1.4	2.0	8.2	4.5

TABLE 2-27 NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUPS - CY 1980
(2 OF 2)

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	L, RA, ML	NO GROUP	ALL CRAFT
TOTALS	18295	13906	88802	14862	3636	15407	817	702	353	119181	255761
ESTIMATE	4.4	5.2	1.3	3.4	7.2	3.3	21.6	23.0	33.3	C-9	
1 STD. ERR	7.2	5.4	34.7	5.8	1.5	6.0	0.3	0.3	0.1	46.6	
ROW 8											

KEY

GROUP

L: LOCALIZER
MB: MARKER BEACON
GS: GLIDE SLOPE

RA: RADAR ALTIMETER
LRN: LONG RANGE RNAV
ML: MICROWAVE LANDING SYSTEM

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-28 NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1980 (1 OF 2)

	L	L, MB	L, MB, GS	L, MB, GS, RA	L, RN	RA	ML	L, MB, GS, ML	L, RN, ML	NO GROUP	ALL CRAFT
TYPE 1	ESTIMATE	8112	2054	3729	171	258	242	155	123	139	70790
	1 STD ERR	6.7	13.8	9.9	49.7	39.0	41.3	* 0.2	0.1	0	0.9
ROW 2		9.5	2.4	4.4	0.2	6.3	0.3	0.2	0.2	0.2	0.0
COLUMN 2		44.3	14.8	4.2	1.2	6.7	1.6	19.0	17.5	39.4	33.2
TYPE 2	ESTIMATE	8795	10891	63676	2489	505	2651	344	265	78	32808
	1 STD ERR	6.5	5.9	1.6	12.6	26.8	22.2	35.8	40.7	* 0.1	2.7
ROW 2		7.4	9.1	53.5	2.1	0.4	2.3	0.3	0.2	0.1	0.0
COLUMN 2		48.1	78.3	71.7	16.8	13.2	17.5	42.1	37.7	22.1	21.6
TYPE 3	ESTIMATE	357	568	13527	3251	449	3360	110	110	31	727
	1 STD ERR	29.4	24.6	2.6	9.0	27.5	8.8	* 0.6	0.6	0.2	18.7
ROW 2		3.1	3.1	73.0	17.5	2.4	18.1	0.6	0.6	0.2	3.9
COLUMN 2		2.0	4.1	15.2	21.9	11.7	21.8	13.5	15.7	8.8	0.6
TYPE 4	ESTIMATE	277	93	6050	2590	401	2622	42	38	*	677
	1 STD ERR	34.9	*	4.0	7.9	26.6	7.9	*	*	0.1	19.5
ROW 2		2.9	1.0	62.4	26.7	4.1	27.0	0.4	0.4	0.1	7.0
COLUMN 2		1.5	0.7	6.8	17.5	10.5	17.0	5.1	5.4	2.3	0.6
TYPE 5	ESTIMATE	10	2	269	17	5	21	C	0	0	86
	1 STD ERR	*	*	6.3	*	*	0	0.0	0.0	0.0	15.8
ROW 2		2.6	0.5	70.2	4.4	1.3	5.5	0.0	0.0	0.0	22.5
COLUMN 2		0.1	0.0	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.1
TYPE 6	ESTIMATE	1	44	513	2634	315	2649	24	24	1	47
	1 STD ERR	*	*	16.0	3.1	20.9	3.1	*	*	0.7	3440
ROW 2		0.0	1.3	14.9	82.4	9.2	82.8	0.7	0.7	0.0	1.4
COLUMN 2		0.0	0.0	0.3	19.1	6.2	18.5	2.9	3.4	0.3	0.0
TYPE 7	ESTIMATE	0	0	397	278	55	278	12	12	3	683
	1 STD ERR	0.0	0.0	7.9	11.3	35.1	11.3	47.8	42.7	*	0.0
ROW 2		0.0	0.0	58.1	40.7	8.1	40.7	1.8	1.8	0.4	1.2
COLUMN 2		0.0	0.0	0.4	1.9	1.4	1.8	1.5	1.7	0.8	0.3
TYPE 8	ESTIMATE	4	2	20	41	32	47	0	0	0	81
	1 STD ERR	*	*	32.0	23.7	28.6	21.0	0.0	0.0	0.0	11.4
ROW 2		2.6	1.3	13.2	27.2	21.2	31.1	0.0	0.0	0.0	53.6
COLUMN 2		0.0	0.0	0.3	0.0	0.3	0.8	0.0	0.0	0.1	0.1

TABLE 2-28 NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1980 (2 OF 2)

	L	L, MB, GS	L, MB, GS, RA	LRN	RA	PL	L, MB, GS, ML	LPA, PL	NC GROUP	ALL CRAFT
TYPE 9	ESTIMATE	5	19	240	2398	1282	2421	80	44	3
	1 STD ERR	*	*	20.9	22.2	6.3	2.1	42.2	*	2674
	ROW 2	0.2	0.7	9.0	89.7	47.9	90.5	3.0	0.1	0.0
	COLUMN 2	0.0	0.1	0.3	16.2	33.4	15.7	9.8	12.5	1.0
TYPE 10	ESTIMATE	17	36	129	41.0	349	436	40	38	718
	1 STD ERR	37.1	30.6	17.8	60.0	13.7	5.3	*	*	0.0
	ROW 2	2.4	5.0	18.0	57.1	48.6	60.7	5.6	5.3	16.2
	COLUMN 2	0.1	0.3	0.1	2.8	9.1	2.8	4.9	5.7	0.1
TYPE 11	ESTIMATE	102	6	14	6	7	8	5	5	5456
	1 STD ERR	41.7	*	*	*	*	*	*	*	0.0
	ROW 2	1.9	0.1	0.3	0.1	0.1	0.1	0.1	0.1	97.6
	COLUMN 2	0.6	0.0	0.0	0.0	0.2	0.1	0.6	0.7	4.5
TYPE 12	ESTIMATE	612	187	235	356	177	431	*	4	3499
	1 STD ERR	20.5	44.0	37.9	19.9	35.2	18.5	*	*	0.0
	ROW 2	17.5	5.3	6.7	10.2	5.1	12.3	0.1	0.1	56.5
	COLUMN 2	3.3	1.3	0.3	2.4	4.6	2.8	0.5	0.6	1.4
TYPE 13	ESTIMATE	4	3	2	2	2	2	2	2	6359
	1 STD ERR	*	*	*	*	*	*	*	*	6369
	ROW 2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	COLUMN 2	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.3	2.5
ALL CRAFT	ESTIMATE	18295	13906	88802	14842	3836	15407	817	702	119181
	1 STD ERR	4.4	5.2	1.3	3.4	7.2	3.3	21.6	23.0	33.3
	ROW 2	7.2	5.4	34.7	5.8	1.5	6.0	0.3	0.3	46.6

KEY

GROUP

GROUP

L: LOCALIZER RA: RADAR ALTIMETER

MB: MARKER BEACON LRA: LCNG RANGE RNAV

GS: GLIDE SLOPE ML: MICROHAWK LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-29 NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
 CY 1980 (1 OF 2)

		L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
NEW ENGLAND	ESTIMATE	2007	2140	10779	1854	522	1969	53	52	7	11615	28399
	1 STD ERR	14.5	14.5	6.2	12.3	16.8	12.0	* 6.7	0.2	0.0	5.5	3.6
	ROW %	7.1	7.5	38.0	6.5	1.8	6.7	0.2	0.2	0.0	40.9	40.9
	COLUMN %	11.0	15.4	12.1	12.5	13.6	12.4	6.5	7.4	2.0	9.7	11.1
EASTERN	ESTIMATE	2025	1573	12169	3221	1C48	3375	145	145	142	17261	36575
	1 STD ERR	14.0	16.2	5.6	8.9	16.8	8.7	* 9.2	0.4	0.4	4.6	3.1
	ROW %	5.5	4.3	33.3	8.8	2.9	9.2	0.4	0.4	0.4	47.2	47.2
	COLUMN %	11.1	11.3	13.7	21.7	27.3	21.9	17.7	20.7	40.2	14.5	14.3
SOUTHERN	ESTIMATE	1221	995	5093	804	92	864	34	34	3	8236	16350
	1 STD ERR	19.3	21.1	9.3	19.0	38.2	19.0	* 4.6	0.2	0.2	44.5	5.0
	ROW %	7.5	6.1	31.1	4.9	6.6	4.9	0.2	0.2	0.0	50.4	5.0
	COLUMN %	6.7	7.2	5.7	5.4	2.4	5.2	4.2	4.8	0.8	6.9	6.4
GREAT LAKES	ESTIMATE	2806	2589	17278	2462	490	2478	217	217	107	19067	44209
	1 STD ERR	12.6	13.0	4.7	11.2	21.7	11.2	43.7	43.7	* 0.5	4.2	2.8
	ROW %	6.3	5.9	39.1	5.6	1.1	5.6	0.5	0.5	0.2	43.1	43.1
	COLUMN %	15.3	18.6	19.5	16.6	12.8	16.1	26.6	30.9	30.3	16.0	17.3
CENTRAL	ESTIMATE	761	267	838	128	33	132	2	0	0	5548	7545
	1 STD ERR	23.4	36.5	19.7	32.0	* 1.1	31.0	0.0	0.0	0.0	7.4	6.4
	ROW %	10.1	3.0	11.1	1.7	1.4	1.7	0.0	0.0	0.0	73.5	64.7
	COLUMN %	6.2	1.9	0.9	0.9	0.9	0.9	0.2	0.0	0.0	6.7	3.0
ROCKY MTS	ESTIMATE	122	14	216	18	18	25	0	0	0	235	614
	1 STD ERR	* 4	* 4	41.8	* 8	* 8	* 8	0.0	0.0	0.0	39.0	24.7
	ROW %	19.9	2.3	35.5	2.9	2.9	4.1	0.0	0.0	0.0	38.3	24.7
	COLUMN %	6.7	0.1	0.2	C.1	C.5	0.2	0.0	0.0	0.2	0.2	0.2
NORTHWEST	ESTIMATE	2717	1605	14347	2115	600	2378	191	120	62	14466	35476
	1 STD ERR	12.9	16.3	5.2	11.0	2C.9	10.8	44.1	* 0.5	0.2	5.0	3.2
	ROW %	7.7	4.5	40.6	6.0	1.7	6.7	0.5	0.3	0.2	40.8	40.8
	COLUMN %	14.9	11.5	16.2	14.3	15.6	15.4	23.4	17.1	17.6	12.1	13.9
WESTERN	ESTIMATE	0	16	230	96	109	110	9	9	0	54	397
	1 STD ERR	0.0	0	37.1	39.9	37.7	36.0	* 2.3	0.0	0.0	4	26.1
	ROW %	0.0	4.0	57.9	24.2	27.5	27.7	2.3	2.3	0.2	13.6	13.6
	COLUMN %	0.0	0.1	0.3	0.6	2.8	0.7	1.1	1.3	0.0	0.0	0.2

TABLE 2-29 NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1980 (2 OF 2)

	L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NG GROUP	ALL CRAFT
SOUTHWEST	ESTIMATE	4048	2639	15389	2698	531	2710	110	110	13	20363
	2 STD ERR	10.5	13.1	5.1	9.7	19.3	9.7	*	*	4-1	45221
	FWN %	9.0	5.6	34.0	6.0	1.2	6.0	0.2	0.2	45.0	2-7
	COLUMN %	22.1	19.0	17.3	18.2	13.8	17.6	13.5	15.7	3.7	17.7
PACIFIC	ESTIMATE	709	695	4222	471	59	524	50	0	0	8102
	2 STD ERR	24.5	25.6	10.1	22.3	*	21.5	*	0.0	0.0	14318
	FWN %	5.0	4.9	30.2	30.3	1.4	3.7	0.3	0.0	0.0	5.3
	COLUMN %	3.9	5.0	4.9	3.2	1.5	3.4	6.1	0.0	0.0	5.6
ALASKAN	ESTIMATE	483	465	3092	521	127	526	41	41	38	4650
	2 STD ERR	28.2	32.4	12.0	24.5	*	24.3	*	*	*	9101
	FWN %	5.3	4.9	33.0	5.7	1.6	5.8	0.5	0.5	0.4	6.6
	COLUMN %	2.6	3.2	3.4	3.5	3.3	3.4	5.0	5.8	10.8	3.6
FOREIGN	ESTIMATE	1614	1020	5719	686	135	653	2	2	2	17484
	2 STD ERR	16.6	21.2	8.5	20.6	43.6	20.4	*	*	*	4-7
	FWN %	9.2	5.8	32.7	30.9	6.8	4.0	0.0	0.0	0.0	48.3
	COLUMN %	8.8	7.3	6.4	4.6	3.5	4.5	0.2	0.3	0.4	6.8
TOTALS	ESTIMATE	18295	13906	88802	14642	3636	15407	817	702	353	119181
	2 STD ERR	4.4	5.2	1.3	3.4	7.2	3.3	21.6	23.0	33.3	0.9
	FWN %	7.2	5.4	34.7	5.8	1.5	6.0	0.3	0.3	0.1	46.6

KEY

GROUP

L: LOCALIZER RA: RACAR ALTIMETER
MA: MARKER BEACON LRN: LONG RANGE RNAV
GS: GLIDE SLOPE ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

APPENDIX A.1. FIRST MAILING COVER LETTER
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

WASHINGTON, D.C. 20591



March 1981

Dear Aircraft Owner:

Enclosed is the annual General Aviation Activity and Avionics Survey for calendar year 1980. Data collected in the survey will be used for performing safety analysis, for determining the demand for air traffic facilities and services, and for assessing the impact of proposed regulatory changes on the general aviation fleet.

The survey is being mailed to owners of a random sample of less than 15 percent of all general aviation aircraft. Because the sample is random, it is possible that more than one of your aircraft may be selected or that your aircraft may be selected in two successive years. This may happen in particular when there are a small number of aircraft of the type that you own. When more than one of your aircraft are selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the aircraft identified. If you cannot determine precisely an answer to a question, please make your best estimate.

If your aircraft was not in use during the year (e.g., in storage, dismantled, destroyed, exported, etc.) please check item 5, indicating the aircraft was not flown. If the aircraft was sold prior to January 1980, it would be quite helpful if you would write a note indicating this on the survey questionnaire. If your aircraft is operated principally by another (leased, etc.), please obtain the necessary information from the operator or forward these materials to that person or firm for completion.

Please return this questionnaire in the enclosed self-addressed postpaid envelope within 10 days. Because the survey is based on a sample of general aviation aircraft, your response is especially important to the accuracy of the results. A prompt response will eliminate the need for additional follow-up contacts. A high response rate will ensure the continued use of sampling methods to collect activity and avionics data.

The data gathered from this survey will be used only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records. We appreciate your cooperation.

Sincerely,
A handwritten signature in black ink, appearing to read "F. C. Osgood".
F. C. Osgood
Chief, Information and
Statistics Division, AMS-200

Enclosure

APPENDIX A-2. SECOND MAILING COVER LETTER

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

WASHINGTON, D.C. 20591



April 1981

Dear Aircraft Owner:

In March the Federal Aviation Administration sent aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the aircraft owners selected at random to receive a questionnaire. As of this date, we have not received a response from you. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. A prompt response will eliminate the need for additional follow-up contacts. If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "FC Osgood".

F. C. Osgood
Chief, Information and Statistics
Division, AMS-200

Enclosure

APPENDIX A.3. SURVEY QUESTIONNAIRE

1. CONTROL NUMBER	DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION GENERAL AVIATION ACTIVITY and AERONAUTICS SURVEY (As of December 31, 1980)		<i>Form Approved OMB No. 2120-0060</i>		
<p>This report is authorized by Section 311 of the Federal Aviation Act of 1958, as amended. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate and timely. Information collected in this survey will be used for statistical purposes only and not to disclose individual aircraft activity.</p>			<input type="checkbox"/> "X" here if you operate your aircraft principally as an air carrier (under FAR 121 or 127). If so, DO NOT complete remainder of form. However please return to address shown below.		
3. AIRCRAFT CHARACTERISTICS					
<p style="text-align: center; margin-top: 10px;"> Federal Aviation Administration P.O. Box 28045 Oklahoma City, Oklahoma 73126 </p>					
<p>INSTRUCTIONS: Please answer questions for the aircraft identified at right. Mail the completed questionnaire in the enclosed postage paid envelope to</p>					
<p>4. What were the total lifetime airframe hours as of December 31, 1980</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 100px; height: 30px;"></td> <td style="width: 20px; text-align: center;">HOURS</td> </tr> </table>					HOURS
	HOURS				
<p>5. Was aircraft flown in Calendar Year 1980? (Check one) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to question 10)</p>					
<p>6. Did you own this aircraft for the entire year of 1980? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No If "No," include previous owner's hours for 1980 in your estimates below.</p>					
<p>7. HOURS FLOWN DURING CALENDAR YEAR 1980</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 100px; height: 30px;"></td> <td style="width: 20px; text-align: center;">HOURS</td> </tr> </table> <p>EXECUTIVE—Corporate flying with professional crew a.</p> <p>BUSINESS—All non-executive flying for business reasons b.</p> <p>PERSONAL—Individual flying for personal reasons c.</p> <p>AERIAL APPLICATION—Agriculture, health, forestry d.</p> <p>INSTRUCTIONAL—Flying with or under supervision of a flight instructor e.</p> <p>COMMUTER AIR CARRIER—Performs at least five scheduled round trips per week between two or more points or carries mail f.</p> <p>AIR TAXI—All Part 135 passenger and cargo operations, including charter and excluding commuter air carrier g.</p> <p>INDUSTRIAL/SPECIAL—Patrol, survey, photo, hoist, etc.—Other than Part 135 h.</p> <p>AIRCRAFT RENTAL BUSINESS—Commercial flying club, leased and rental aircraft activity i.</p> <p>OTHER—R&D government, air show, sales, parachuting, etc. j.</p>					HOURS
	HOURS				
<p>8. Was this aircraft flown on an Instrument Flight Plan in 1980? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No If "Yes," how many hours were flown on an instrument Flight Plan?</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 100px; height: 30px;"></td> <td style="width: 20px; text-align: center;">IFR HOURS</td> </tr> </table>					IFR HOURS
	IFR HOURS				
<p>9. Estimate of this aircraft's average rate of fuel consumption (gal./hr.) during 1980 (Report whole gal. only)</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 100px; height: 30px;"></td> <td style="width: 20px; text-align: center;">GAL./HR.</td> </tr> </table>					GAL./HR.
	GAL./HR.				
<p>10. State (Abbreviation) or foreign country in which aircraft was based as of December 31, 1980.....</p> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 100px; height: 30px;"></td> <td style="width: 20px; text-align: center;">STATE</td> </tr> </table>					STATE
	STATE				
<p>11. AVIONICS EQUIPMENT CAPABILITY ("X" ALL boxes that reflect this aircraft's current capability. If none, check the last box in each group.)</p>					
<p>VHF COMMUNICATIONS EQUIPMENT "X"</p> <p>VHF Communications System:</p> <p>300 Channels or less a.</p> <p>720 Channels or more b.</p> <p>More than one comm. system c.</p> <p>No VHF Communications Equipment d. <input type="checkbox"/></p>					
<p>TRANSPONDER EQUIPMENT</p> <p>4096 Code e.</p> <p>Altitude Encoding Equipment f.</p> <p>No Transponder Equipment g. <input type="checkbox"/></p>					
<p>NAVIGATION EQUIPMENT</p> <p>VOR Receiver:</p> <p>100 Channels h.</p> <p>200 Channels i.</p> <p>More than one VOR Receiver j.</p> <p>Automatic Direction Finder (ADF) k.</p> <p>Distance Measuring Equipment (DME) l.</p> <p>Area Navigation Equipment (RNAV) m.</p> <p>Long Range Nav. (Doppler, INS, Other) n.</p> <p>Flight Director o.</p> <p>Radar Altimeter p.</p> <p>Flight Management Computer q.</p> <p>No Navigation Equipment r. <input type="checkbox"/></p>					
<p>ILS RECEIVING EQUIPMENT</p> <p>Localizer s.</p> <p>Marker Beacon t.</p> <p>Glide Slope u.</p> <p>Microwave Landing System v.</p> <p>No ILS Receiving Equipment w. <input type="checkbox"/></p>					
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> THANK YOU FOR YOUR COOPERATION </div>					

FAA Form 1800-54 (11-80) Supersedes previous edition

APPENDIX B

SAMPLE DESIGN

B.1 SAMPLE FRAME AND SIZE

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for three years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

- 1) The accuracy of owners' addresses deteriorated causing the number of questionnaires returned by the post office to double from 1977 to 1978 and again from 1978 to 1980. This partially accounted for the lower survey response rates in 1978, 1979, and 1980.
- 2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

- 1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and

- 2) aircraft owned by non-U.S. corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

- 1) Aircraft registered to dealers.
- 2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.
- 3) Aircraft with a known inaccurate owner's address.
- 4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1980, the sample frame consisted of 255,761 general aviation aircraft records from which 35,834 records were sampled, yielding a 14.0 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

B.2 DESCRIPTION OF SAMPLE DESIGN

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE

TYPE	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
Piston			
1 engine, 1-3 seats	85,024	11,963	14.0
1 engine, 4+ seats	119,065	12,410	10.4
2 engines, 1-6 seats	18,529	2,267	12.2
2 engines, 7+ seats	9,701	1,850	19.1
Other Piston	383	319	83.3
Turboprop			
2 engines, 1-12 seats	3,440	639	18.6
2 engines, 13+ seats	683	256	37.5
Other Turboprop	159	68	42.8
Turbojet			
2 engines	2,674	628	23.5
Other Turbojet	726	426	58.7
Rotorcraft			
Piston	5,502	2,310	42.0
Turbine	3,506	886	25.3
Other	6,369	1,839	28.9
TOTAL	255,761	35,834	14.0

TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	7,423	1,551	20.9
Central	16,414	2,356	14.4
Eastern	28,702	4,445	15.5
European (Foreign)	375	140	37.3
Great Lakes	45,486	4,295	9.4
New England	9,146	3,284	35.9
Northwestern	17,520	2,093	11.9
Pacific	594	369	62.1
Rocky Mountain	14,533	2,461	16.9
Southern	35,945	6,194	17.2
Southwestern	36,151	3,379	9.3
Western	43,581	5,265	12.1
TOTAL	255,761	35,834	14.0

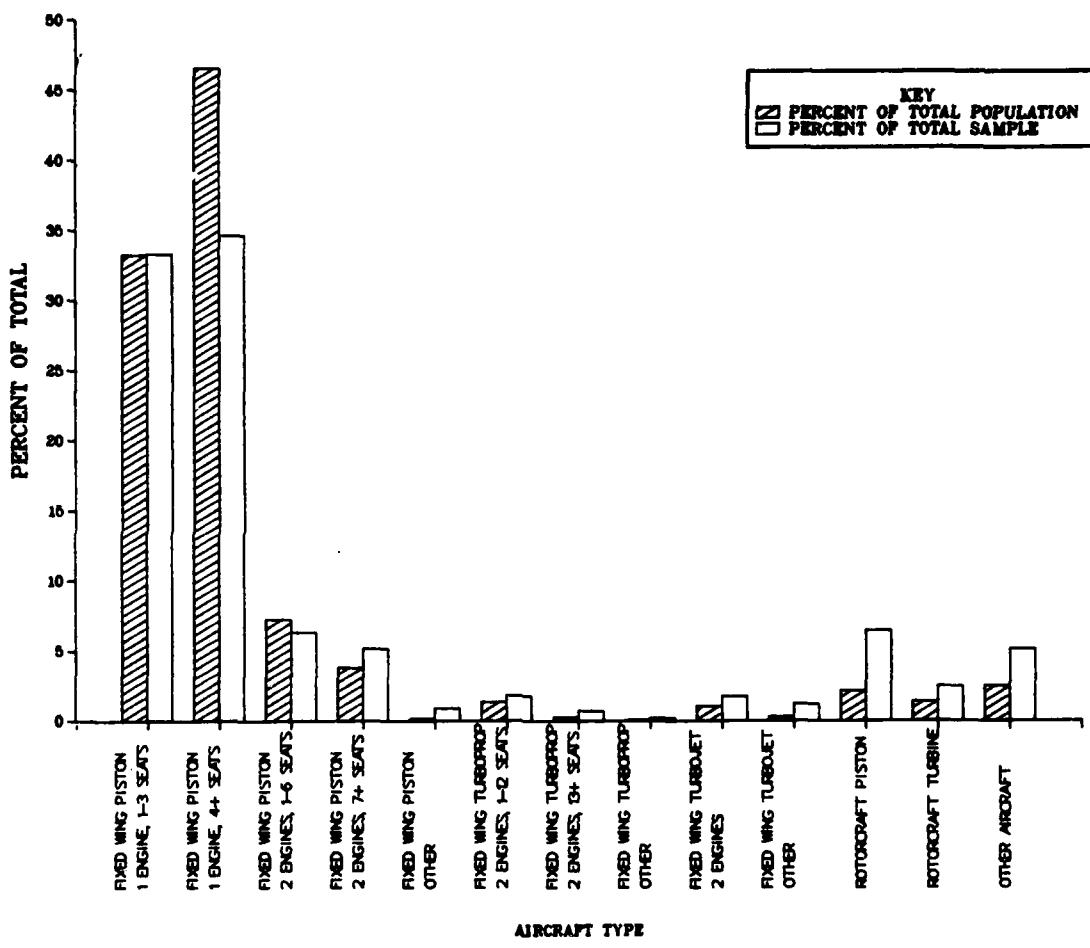


FIGURE B.1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE

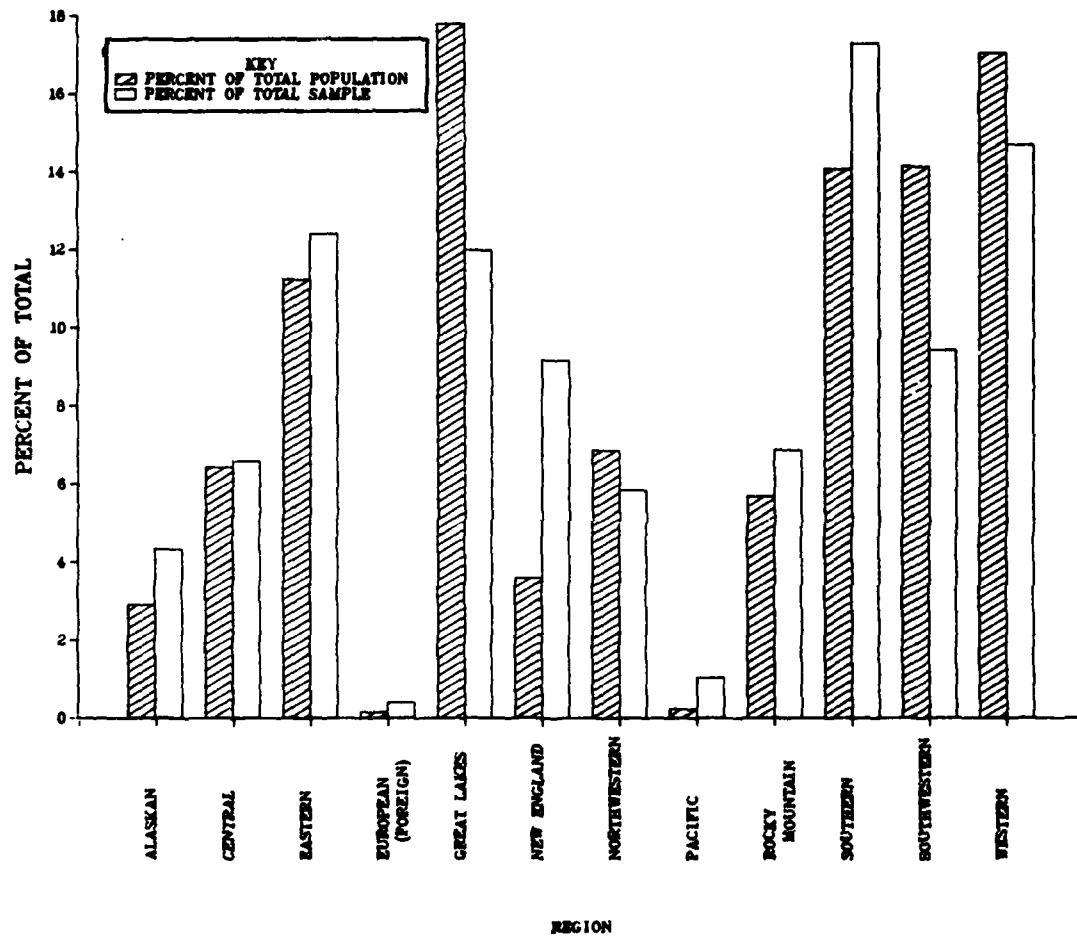


FIGURE B.2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

- 1) State or territory of aircraft registration.
- 2) A variable called make-model index constructed from the thirteen aircraft types and the 300+ aircraft manufacturer/model groups of 20 or more general aviation aircraft as defined by the FAA's Service Difficulty Reporting (SDR) Program. (See Appendix D for the names and definitions of these groups.)

The 54 levels of the state criterion and the 344 levels of the make-model index yielded a matrix of 54 by 344 or 18,576 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to cell size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, and which corresponded to the number of aircraft in the sample frame represented by that aircraft. When all responses to the survey were tallied, each weight was adjusted according to the response rate for the aircraft's cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

- 1) Non-respondents' weights were changed to zero.
- 2) The weights of all responding aircraft in cells where there were fewer than four telephone follow-up contacts were adjusted uniformly by dividing the initial weights by the response rate.
- 3) In cells where there were four or more telephone follow-up contacts, the weights of the mail respondents remained unchanged, and the weights of the telephone respondents were increased by dividing their initial weights by the proportion of non-respondents contacted by telephone.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures. In addition, 3) above removes non-response bias from the affected make-model indices and states of registration by weighting the telephone sample of mail non-respondents to adjust for the remaining non-respondents.

B.3 ERROR

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors.¹ Sampling errors occur because the estimates are based on a sample -- not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

B.3.1 Sampling Error

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model group, and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for all estimated quantities. In some cases, the tables contain the percent standard

¹ Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14.

error, which is the standard error divided by the corresponding estimate. The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be $2,794 \pm 2(133)$ or (2528, 3060). One would say that the number of active rotorcraft with piston engines lies somewhere between 2528 and 3060 with 95 percent confidence.

B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- o The second mailing and telephone survey of a sample of non-respondents were conducted in addition to the original mailing to improve the response rate, since a low response rate is a major cause of non-sampling error. 65 percent of those aircraft sampled responded to at least one question of the survey. This rate represents a decrease in response from 1977 when the survey achieved an 80 percent response rate and 1979 when the response rate was 71 percent. Possible causes of the decrease include:

- 1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This increased the number of questionnaires returned undelivered by the postmaster from around 500 in 1977 to over 1000 in 1978 to almost 2500 in 1980, hence decreasing the response rate.
- 2) Repeated sampling of aircraft in two and possibly three or four successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer/model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1980 than in 1979, 1978 and 1977.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. The lowest response rate for any region was 26 percent for the European (Foreign) Region due to mail delivery and telephone contact difficulties. The Pacific and Alaskan Regions' rates were low at 52 and 51 percent respectively for similar reasons. These three regions together, however, represented only about 3 percent of the U.S. general aviation fleet. The fixed wing piston other (3 or more engines) category had the lowest response rate at 48 percent of any of the aircraft types, but these aircraft represented less than 1 percent of the fleet.

- o The telephone sample of mail non-respondents also helped to minimize bias in results caused by differences in attributes between respondents and non-respondents.
- o The survey questionnaire was designed and tested to minimize misinterpretation of questions by the aircraft owners.
- o To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."
- o Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.

¹See Appendix A.1.

- o The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

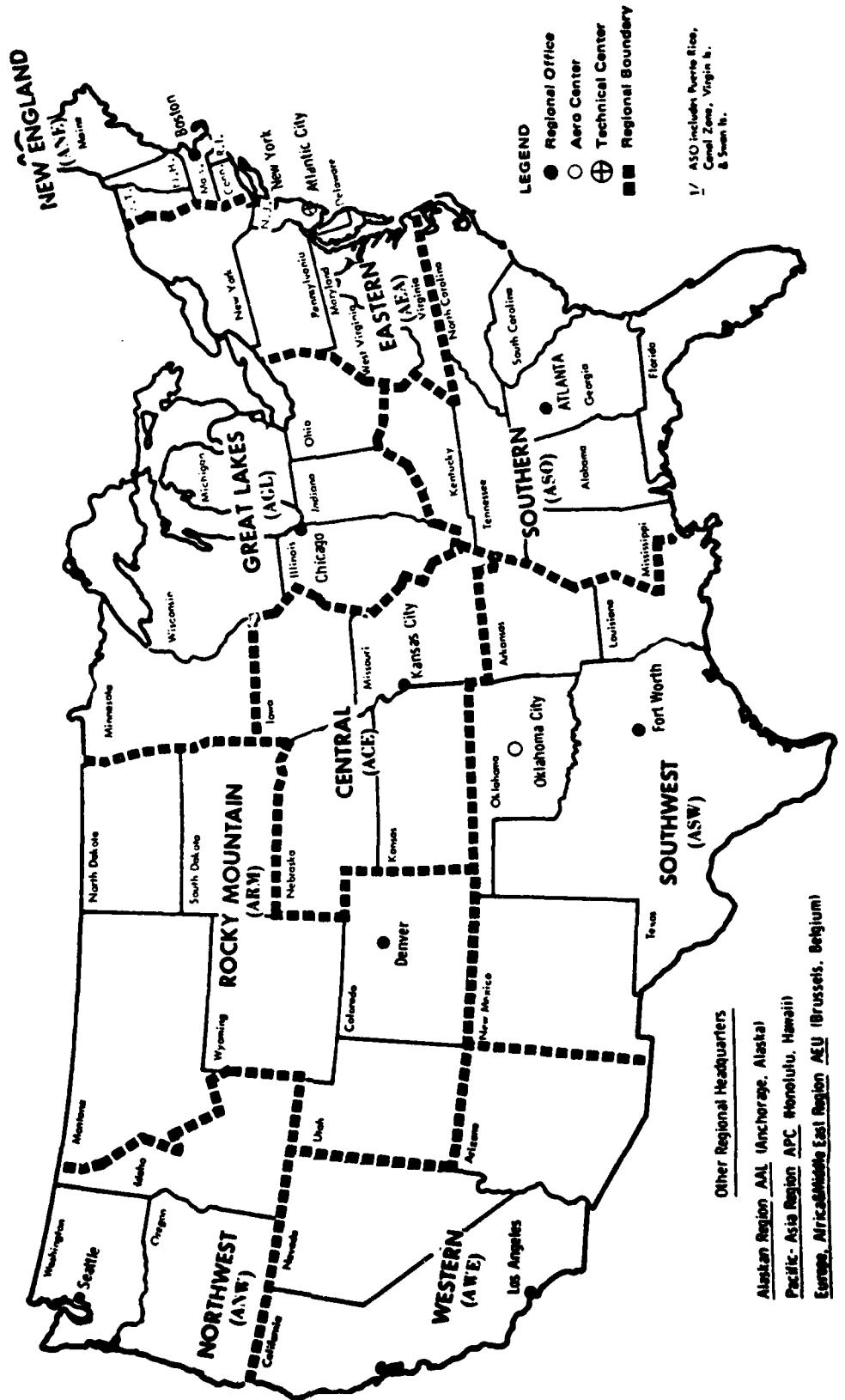
TABLE B-4. RESPONSE RATES BY REGION

REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	51	Pacific	52
Central	70	Rocky Mountain	65
Eastern	70	Southern	62
European (Foreign)	26	Southwestern	64
Great Lakes	71	Western	63
New England	69		
Northwestern	62	TOTAL	65

TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	68	2 engines	74
1 engine, 4+ seats	65	Other	61
2 engines, 1-6 seats	60		
2 engines, 7+ seats	52	Rotorcraft	
Other	48	Piston	65
		Turbine	65
Turboprop			
2 engines, 1-12 seats	71	Other	64
2 engines, 13+ seats	69		
Other	66	TOTAL	65

APPENDIX C. FAA REGIONAL BOUNDARIES



APPENDIX D.

SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THIS TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

FAA	SDR	FAA	SDR	FAA	SDR
0050101	AIRAMS B50S	0390101	AIRTBBCAT300	0190918	ABCNCBA65
0050103	AIRAMS B50S	0390103	AIRTBBCAT300	0191014	ABCNCBA65
0050105	AIRAMS B50S	0390104	AIRTRCBAT300	0191016	ABCNCAC65
5500604	AEEFORSJ2	*FALC10	AMC	0190302	ABCNCAC3
8680207	AEEFCSPSA316	2730101	AMC	0190304	ABCNCAC3
8680513	AEEFCSPSA316	*FALC20	AMC	0191002	ABCNCAC58
8680515	AEEFOSPSA316	2720302	AMC	0191004	ABCNCAC58
8680605	AEEFOSPSA316	*FALC20	AMC	0191006	ABCNCAC58
8680615	AEEFCPSA316	2720303	AMC	0191008	ABCNCAC58
8680616	AEEFCPSA316	2720304	AMC	0191010	ABCNCAC58
8680610	AEEFCSPSA341	2720305	AMC	0191012	ABCNCAC58
1181414	AGUSTA205	2720306	AMC	0900102	AVIAN FALCON
0144202	AIEPTSA	2730103	AMC	0143002	AYRES S2
0144204	AIEFTSA	8141617	ARCRNHE37	0143004	AYRES S2
0144206	AIEPTSA	8142901	ABCNEEE37	0143006	AYRES S2
1850102	AIEPTSA	1850202	ARCTICS1A	0143008	AYRES S2
1850104	AIEPTSA	1850204	ARCTICS1A	0143010	AYRES S2
1850106	AIEFTSA	1850206	ARCTICS1A	0143012	AYRES S2
1850108	AIEPTSA	1850208	ARCTICS1A	0143022	AYRES S2
1850110	AIEPTSA	1850210	ARCTICS1A	0970101	AYRES S2
1850112	AIEPTSA	1850212	ARCTICS1A	0970102	AYRES S2
1850114	AIEPTSA	1850214	ARCTICS1A	0970104	AYRES S2
1850116	AIEPTSA	1850216	ARCTICS1A	0970106	AYRES S2
1850118	AIEPTSA	1850302	ARCTICS1E1	0970202	AYRES S2
1850120	AIEPTSA	1850304	ARCTICS1E1	7630203	AYRES S2
1850122	AIEFTSA	1850306	ARCTICS1E1	7630204	AYRES S2
4570424	AIEPTSA	1850308	ARCTICS1E1	8380202	AYRES S2
4570602	AIEPTSA	1850310	ARCTICS1E1	8380204	AYRES S2
4570604	AIEPTSA	1850312	ARCTICS1E1	8380206	AYRES S2
4570606	AIEPTSA	0191212	ABCNCBA15	8380208	AYRES S2
4570608	AIEPTSA	0191204	ABCNCBA15	8380302	AYRES S2
4570610	AIEFTSA	0190709	ABCNCBA65	9380306	AYRES S2
4570612	AIEPTSA	0190710	ABCNCAC65	1480202	BAC 111
4570614	AIEPTSA	0190802	ABCNCBA65	1480204	BAC 111
4570616	AIEPTSA	0190902	ABCNCBA65	1480208	BAC 111
4570618	AIEFTSA	0190904	ABCNCBA65	1480210	BAC 111
4570620	AIEPTSA	0190906	ABCNCBA65	1480218	BAC 111
4570622	AIEPTSA	0190908	ABCNCBA65	1480221	BAC 111
4570624	AIEPTSA	0190910	ABCNCAC65	1480264	BAC 111
0440102	AIBSPC18	0190712	ABCNCAC65	1480268	BAC 111
0440104	AIBSPC18	0190914	ABCNCAC65	1480270	BAC 111
9200202	AIBSPC18	0190916	ABCNCBA65		

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1480273	BAC 111	1150904	BEECH 18	1151216	BEECH 23
1480277	BAC 111	1150806	BEECH 18	1151226	BEECH 23
1480283	BAC 111	1150808	BEECH 18	1151230	BEECH 23
1121223	BAG E206	1150902	BEECH 18	1151240	BEECH 23
1121224	BAG E206	1150904	BEECH 18	1151242	BEECH 23
4230170	BAG EH125	1150906	BEECH 18	1151250	BEECH 23
*JETSTM	BAG JETSTM	1150907	BEECH 18	1151252	BEECH 23
4130402	BAG JETSTM	1150908	BEECH 18	1151253	BEECH 23
1050109	BALWKSFIREFY	1150910	BEECH 18	1151254	BEECH 23
1050101	BALWKSFIREFY	1150910	BEECH 18	1151402	BEECH 33
1050103	BALWKSFIREFY	1150911	BEECH 18	1151404	BEECH 33
1050104	BALWKSFIREFY	1150912	BEECH 18	1151406	BEECH 33
1050107	BALWKSFIREFY	1150913	BEECH 18	1151408	BEECH 33
1050109	BALWKSFIREFY	1150914	BEECH 18	1151410	BEECH 33
1152915	BEECH 100	1150916	BEECH 18	1151414	BEECH 33
1152916	BEECH 100	1150918	BEECH 18	1151419	BEECH 33
1152917	BEECH 100	1150920	BEECH 18	1151422	BEECH 33
1152919	BEECH 100	1150922	BEECH 18	1151423	BEECH 33
1150502	BEECH 17	1150924	BEECH 18	1151424	BEECH 33
1150504	BEECH 17	1150926	BEECH 18	1151425	BEECH 33
1150506	BEECH 17	1150928	BEECH 18	1151432	BEECH 33
1150508	BEECH 17	1150530	BEECH 18	1151434	BEECH 33
1150510	BEECH 17	1150932	BEECH 18	1151435	BEECH 33
1150512	BEECH 17	1151001	BEECH 18	1151502	BEECH 35
1150514	BEECH 17	1151002	BEECH 18	1151504	BEECH 35
1150516	BEECH 17	1151004	BEECH 18	1151506	BEECH 35
1150519	BEECH 17	1151006	BEECH 18	1151508	BEECH 35
1150520	BEECH 17	1151007	BEECH 18	1151510	BEECH 35
1150522	BEECH 17	1151008	BEECH 18	1151512	BEECH 35
1150524	BEECH 17	1151009	BEECH 18	1151514	BEECH 35
1150526	BEECH 17	1151010	BEECH 18	1151516	BEECH 35
1150528	BEECH 17	1151011	BEECH 18	1151518	BEECH 35
1150530	BEECH 17	1151012	BEECH 18	1151520	BEECH 35
1150532	BEECH 17	1151013	BEECH 18	1151522	BEECH 35
1150534	BEECH 17	1151014	BEECH 18	1151524	BEECH 35
1150536	BEECH 17	1151015	BEECH 18	1151526	BEECH 35
1150538	BEECH 17	1151016	BEECH 18	1151528	BEECH 35
1150540	BEECH 17	1151018	BEECH 18	1151530	BEECH 35
1150542	BEECH 17	1151019	BEECH 18	1151532	BEECH 35
1150544	BEECH 17	1151020	BEECH 18	1151538	BEECH 35
1150546	BEECH 17	1151021	BEECH 18	1151540	BEECH 35
1150548	BEECH 17	1151022	BEECH 18	1151544	BEECH 35
1150550	BEECH 17	1151023	BEECH 18	1151546	BEECH 35
1150552	BEECH 17	1151024	BEECH 18	1151548	BEECH 35
1150554	BEECH 17	1151026	BEECH 18	1151550	BEECH 35
1150556	BEECH 17	1151040	BEECH 18	1151602	BEECH 36
1150558	BEECH 17	1151042	BEECH 18	1151603	BEECH 36
1150560	BEECH 17	1151044	BEECH 18	1151604	BEECH 36
1150562	BEECH 17	1151046	BEECH 18	1151605	BEECH 36
1150564	BEECH 17	1151048	BEECH 18	1151606	BEECH 36
1150202	BEECH 18	1151050	BEECH 18	1151607	BEECH 36
1150204	BEECH 18	1151102	BEECH 18	1152002	BEECH 45
1150602	BEECH 18	1152920	BEECH 200	1152004	BEECH 45
1150604	BEECH 18	1152926	BEECH 200	1152006	BEECH 45
1150702	BEECH 18	1152928	BEECH 200	1152008	BEECH 45
1150704	BEECH 18	1151202	BEECH 23	1152010	BEECH 45
1150706	BEECH 18	1151204	BEECH 23	1152012	BEECH 45
1150708	BEECH 18	1151208	BEECH 23	1152013	BEECH 45
1150710	BEECH 18	1151212	BEECH 23	1152014	BEECH 45
1150712	BEECH 18	1151214	BEECH 23	1152015	BEECH 45
1150802	BEECH 18	1151215	BEECH 23	1152016	BEECH 45

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1152502	BECH 50	1154004	BECH 99	1181006	BELL 47
1152504	BECH 50	1181402	BELL 204	1181007	BELL 47
1152506	BECH 50	1181404	BELL 204	1181008	BELL 47
1152508	BECH 50	1181405	BELL 204	1181009	BELL 47
1152510	BECH 50	1181408	BELL 204	118100V	BELL 47
1152512	BECH 50	1181410	BELL 204	1181010	BELL 47
1152514	BECH 50	1181411	BELL 204	1181011	BELL 47
1152516	BECH 50	2680101	BELL 204	1181012	BELL 47
1152518	BECH 50	9680102	BELL 204	1181013	BELL 47
1152520	BECH 50	1181502	BELL 206	1181014	BELL 47
1152522	BECH 50	1181503	BELL 206	1181016	BELL 47
1152524	BECH 50	1181504	BELL 206	1181019	BELL 47
1152526	BECH 50	1181506	BELL 206	1181020	BELL 47
1152529	BECH 50	1181508	BELL 206	1181022	BELL 47
1152530	BECH 50	1181510	BELL 206	1181023	BELL 47
1152532	BECH 50	1181511	BELL 206	1181024	BELL 47
1152534	BECH 50	1181512	BELL 206	1181025	BELL 47
1152536	BECH 50	1181522	BELL 206	1181026	BELL 47
1152702	BECH 55	1181579	BELL 206	1181027	BELL 47
1152714	BECH 55	1182107	BELL 206	1181028	BELL 47
1152706	BECH 55	1181420	BELL 212	1181029	BELL 47
1152708	BECH 55	1180602	BELL 47	1181030	BELL 47
1152728	BECH 55	1180603	BELL 47	1181031	BELL 47
1152729	BECH 55	1180604	BELL 47	1181032	BELL 47
1152730	BECH 55	1180606	BELL 47	1181033	BELL 47
1152732	BECH 55	1180702	BELL 47	1181034	BELL 47
1152736	BECH 56	1180704	BELL 47	1181038	BELL 47
1152738	BECH 56	1180902	BELL 47	1181032	BELL 47
1152740	BECH 58	1180804	BELL 47	1181060	BELL 47
1152742	BECH 58	1180806	BELL 47	1181063	BELL 47
1152746	BECH 58	1180808	BELL 47	1181064	BELL 47
1153602	BECH 60	1180310	BELL 47	1181065	BELL 47
1153614	BECH 60	1180811	BELL 47	1181066	BELL 47
1153615	BECH 60	1180812	BELL 47	1181067	BELL 47
1152802	BECH 65	1180813	BELL 47	1181068	BELL 47
1152803	BECH 65	1180814	BELL 47	1181070	BELL 47
1152804	BECH 65	1180816	BELL 47	1181071	BELL 47
1152805	BECH 65	1180820	BELL 47	1181073	BELL 47
1153005	BECH 76	1180822	BELL 47	1181102	BELL 47
1153017	BECH 77	1180942	BELL 47	1181103	BELL 47
1152806	BECH 80	1180844	BELL 47	1181104	BELL 47
1152807	BECH 80	1180845	BELL 47	1181106	BELL 47
1152808	BECH 80	1180846	BELL 47	1181202	BELL 47
1152809	BECH 80	118084C	BELL 47	1181310	BELL 47
1152812	BECH 80	118084D	BELL 47	1181403	BELL 47
1152814	BECH 80	118084E	BELL 47	1181585	BELL 47
1153010	BECH 80	118084F	BELL 47	2390202	BELL 47
1152902	BECH 90	118034G	BELL 47	8930103	BELL 47
1152904	BECH 90	118084H	BELL 47	0191102	BLANCA11
1152912	BECH 90	118084K	BELL 47	0191104	BLANCA11
1152913	BECH 90	118084M	BELL 47	0191106	BLANCA11
1152914	BECH 90	118084P	BELL 47	0191108	BLANCA11
1153401	BECH 90	118084R	BELL 47	0191110	BLANCA11
1153402	BECH 95	1180947	BELL 47	0191112	BLANCA11
1153404	BECH 95	1180902	BELL 47	9140404	BLANCA11
1153406	BECH 95	1180904	BELL 47	9140408	BLANCA11
1153403	BECH 95	1181001	BELL 47	1201002	BLANCA1413
1153410	BECH 95	1181002	BELL 47	1201004	BLANCA1413
1153802	BECH 99	1181003	BELL 47	1201006	BLANCA1413
1154002	BECH 99	1181004	BELL 47	1201008	BLANCA1413
		1181005	BELL 47	1220802	BLANCA1419

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1220404	BLANCA1419	2110158	BLANCA7	138360W	BOEING707
1220406	BLANCA1419	2110160	BLANCA7	138360P	BOEING707
1220403	BLANCA1419	2110162	BLANCA7	138360R	BOEING707
3080102	BLANCA1419	2110164	BLANCA7	139360T	BOEING707
3080104	BLANCA1419	2110166	BLANCA7	138360V	BOEING707
3080106	BLANCA1419	2110168	BLANCA7	139360X	BOEING707
3080103	BLANCA1419	2110170	BLANCA7	138361J	BOEING707
3080112	BLANCA1419	2110172	BLANCA7	1393612	BOEING707
3080114	BLANCA1419	2110174	BLANCA7	1383614	BOEING707
3080116	BLANCA1419	2110176	BLANCA7	1383616	BOEING707
3080118	BLANCA1419	21101M2	BLANCA7	1383618	BOEING707
3080122	BLANCA1419	21101M6	BLANCA7	139361G	BOEING707
3080124	BLANCA1419	21101M8	BLANCA7	138365B	BOEING707
3080126	BLANCA1419	21101MF	BLANCA7	139365D	BOEING707
3080129	BLANCA1419	21101ML	BLANCA7	138365P	BOEING707
4580802	BLANCA1419	21101MR	BLANCA7	138365H	BOEING707
4580804	BLANCA1419	21101MW	BLANCA7	138365R	BOEING707
4580806	BLANCA1419	21101N2	BLANCA7	1383660	BOEING707
4580808	BLANCA1419	21101N7	BLANCA7	1383663	BOEING707
1220432	BLANCA17	21101N8	BLANCA7	1383668	BOEING707
1220433	BLANCA17	21101NB	BLANCA7	138366B	BOEING707
1220434	BLANCA17	21101NG	BLANCA7	138366C	BOEING707
1220435	BLANCA17	21101NN	BLANCA7	138366D	BOEING707
1220436	BLANCA17	21101NN	BLANCA7	138366F	BOEING707
1220437	BLANCA17	21101NS	BLANCA7	138366H	BOEING707
1220940	BLANCA17	21101NX	BLANCA7	138366K	BOEING707
0190107	BLANCA7	21101P3	BLANCA7	138366H	BOEING707
1220438	BLANCA7	21101PC	BLANCA7	138366P	BOEING707
1220460	BLANCA7	21101PH	BLANCA7	1383C77	BOEING707
1220501	BLANCA7	21101PK	BLANCA7	139367A	BOEING707
1220601	BLANCA7	21101PN	BLANCA7	138367B	BOEING707
1220701	BLANCA7	21101PT	BLANCA7	139367C	BOEING707
2110102	BLANCA7	21101PY	BLANCA7	1383C7D	BOEING707
2110104	BLANCA7	1220801	BLANCA8	138367E	BOEING707
2110106	BLANCA7	1220803	BLANCA8	1383C7F	BOEING707
2110108	BLANCA7	2110612	BLANCA8	139367G	BOEING707
2110110	BLANCA7	1520202	BNCFM EN2	138367H	BOEING707
2110112	BLANCA7	1520204	BNCFM EN2	139367J	BOEING707
2110114	BLANCA7	1520206	BNCFM EN2	138367K	BOEING707
2110116	BLANCA7	1520207	BNCFM EN2	138367L	BOEING707
2110118	BLANCA7	1520209	BNCFM EN2	138367M	BOEING707
2110120	BLANCA7	1520210	BNCFM EN2	139367N	BOEING707
2110122	BLANCA7	1520215	BNCFM EN2	138367P	BOEING707
2110124	BLANCA7	1520220	BNCFM EN2	138367C	BOEING707
2110126	BLANCA7	1520221	BNCFM EN2	138367R	BOEING707
2110128	BLANCA7	1520226	BNCFM EN2	138367S	BOEING707
2110130	BLANCA7	1520227	BNCFM EN2	138367T	BOEING707
2110132	BLANCA7	1520302	BNCFM EN2	139367U	BOEING707
2110133	BLANCA7	7080221	BNCFM EN2	138367V	BOEING707
2110134	BLANCA7	70P0227	BNCFM EN2	138367W	BOEING707
2110136	BLANCA7	1383601	BOEING707	138367X	BOEING707
2110138	BLANCA7	1393612	BOEING707	139367Y	BOEING707
2110140	BLANCA7	1383604	BOEING707	138368B	BOEING707
2110142	BLANCA7	1393605	BOEING707	138368D	BOEING707
2110144	BLANCA7	1383606	BOEING707	138368F	BOEING707
2110146	BLANCA7	1383608	BOEING707	138368H	BOEING707
2110148	BLANCA7	1383609	BOEING707	136369K	BOEING707
2110150	BLANCA7	139360C	BOEING707	138369M	BOEING707
2110152	BLANCA7	138360F	BOEING707	139369R	BOEING707
2110154	BLANCA7	138360B	BOEING707	1383701	BOEING707
2110156	BLANCA7	138360K	BOEING707	1383706	BOEING707

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1383802	BOEING720	1384059	BOEING727	1384460	BOEING737
1383804	BOEING720	1384063	BOEING727	1384462	BOEING737
1383810	BOEING720	1384067	BOEING727	138446F	BOEING737
1383814	BOEING720	138406G	BOEING727	138446G	BOEING737
1383818	BOEING720	1384071	BOEING727	138446J	BOEING737
1383822	BOEING720	1384073	BOEING727	138446N	BOEING737
1383826	BOEING720	1384074	BOEING727	138446W	BOEING737
1383830	BOEING720	1384075	BOEING727	138446R	BOEING737
1383841	BOEING720	1384076	BOEING727	138446R	BOEING737
1383845	BOEING720	1384077	BOEING727	138446S	BOEING737
1383849	BOEING720	1384078	BOEING727	138446T	BOEING737
1383853	BOEING720	1384079	BOEING727	138446V	BOEING737
1383857	BOEING720	138407E	BOEING727	138446W	BOEING737
1383861	BOEING720	138407F	BOEING727	138446Y	BOEING737
1383865	BOEING720	138407K	BOEING727	1384492	BOEING737
1383869	BOEING720	138407L	BOEING727	1384801	BOEING747
1383873	BOEING720	1384078	BOEING727	1384802	BOEING747
1383877	BOEING720	138407W	BOEING727	1384803	BOEING747
1394001	BOEING727	138407P	BOEING727	1384804	BOEING747
1384002	BOEING727	1384070	BOEING727	1384811	BOEING747
1384003	BOEING727	138407B	BOEING727	1384812	BOEING747
1384004	BOEING727	138407S	BOEING727	1384813	BOEING747
1384005	BOEING727	138407T	BOEING727	1384814	BOEING747
1384006	BOEING727	138407W	BOEING727	1384815	BOEING747
1384008	BOEING727	1384080	BOEING727	1384820	BOEING747
138400B	BOEING727	1384082	BOEING727	1384843	BOEING747
138400C	BOEING727	1384088	BOEING727	1384856	BOEING747
138400E	BOEING727	138408D	BOEING727	1384866	BOEING747
138400F	BOEING727	138408F	BOEING727	1384868	BOEING747
138400G	BOEING727	138408H	BOEING727	1384869	BOEING747
138400H	BOEING727	138409L	BOEING727	1384871	BOEING747
138400J	BOEING727	1384098	BOEING727	1384872	BOEING747
138400K	BOEING727	1384098	BOEING727	1384873	BOEING747
138400M	BOEING727	1384098W	BOEING727	1384874	BOEING747
1384010	BOEING727	138409X	BOEING727	1384880	BOEING747
1384011	BOEING727	13840X2	BOEING727	1384881	BOEING747
1384012	BOEING727	13840XY	BOEING727	1384882	BOEING747
1384013	BOEING727	1384402	BOEING737	1384885	BOEING747
1384015	BOEING727	1384404	BOEING737	1384886	BOEING747
1384016	BOEING727	1384435	BOEING737	1384888	BOEING747
1384017	BOEING727	1384438	BOEING737	1384889	BOEING747
1384019	BOEING727	1384453	BOEING737	1384890	BOEING747
1384019	BOEING727	1384454	BOEING737	1384891	BOEING747
1384019	BOEING727	1384457	BOEING737	1384892	BOEING747
1384025	BOEING727	1384458	BOEING737	1384893	BOEING747
1384027	BOEING727	1384459	BOEING737	1384894	BOEING747
1384028	BOEING727	1384461	BOEING737	1384895	BOEING747
138402C	BOEING727	1384466	BOEING737	1384896	BOEING747
1384030	BOEING727	1384469	BOEING737	1384897	BOEING747
1384032	BOEING727	138446R	BOEING737	1384898	BOEING747
1384035	BOEING727	1384473	BOEING737	1384899	BOEING747
1384037	BOEING727	1384476	BOEING737	1390102	BOEING75
1384041	BOEING727	1384477	BOEING737	1390104	BOEING75
1384043	BOEING727	1384479	BOEING737	1390106	BOEING75
1384044	BOEING727	1384479	BOEING737	1390108	BOEING75
138404G	BOEING727	1384480	BOEING737	1390110	BOEING75
138404V	BOEING727	1384484	BOEING737	1390112	BOEING75
1384042	BOEING727	1384488	BOEING737	1390114	BOEING75
1384056	BOEING727	138448A	BOEING737	1390116	BOEING75
1384057	BOEING727	138448B	BOEING737	1390118	BOEING75
1384058	BOEING727	138448C	BOEING737	1390120	BOEING75

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1380121	BOEING75	2390301	CCOPTB47ERLL	2073708	CESSNA177
1380122	BOEING75	2390302	CCOPTB47ERLL	2073709	CESSNA177
1380124	BOEING75	2390303	CCOPTB47ERLL	2072602	CESSNA180
1380128	BOEING75	2390304	CCOPTB47ERLL	2072604	CESSNA180
1380130	BOEING75	2390305	CCOPTB47ERLL	2072606	CESSNA180
1380131	BOEING75	2071402	CESSNA120	2072608	CESSNA180
1380132	BOEING75	2071602	CESSNA140	2072610	CESSNA180
1380134	BOEING75	2071604	CESSNA140	2072612	CESSNA180
1380136	BOEING75	2071802	CESSNA150	2072614	CESSNA180
1380137	BOEING75	2071804	CESSNA150	2072616	CESSNA180
1380138	BOEING75	2071806	CESSNA150	2072618	CESSNA180
1380140	BOEING75	2071808	CESSNA150	2072622	CESSNA180
1380142	BOEING75	2071810	CESSNA150	2072624	CESSNA180
1380144	BOEING75	2071812	CESSNA150	2072702	CESSNA182
1380146	BOEING75	2071814	CESSNA150	2072704	CESSNA182
1380148	BOEING75	2071816	CESSNA150	2072706	CESSNA182
1380150	BOEING75	2071818	CESSNA150	2072709	CESSNA182
1380152	BOEING75	2071820	CESSNA150	2072710	CESSNA182
1380154	BOEING75	2071822	CESSNA150	2072712	CESSNA182
1406006	BCIKHS105	2071824	CESSNA150	2072714	CESSNA182
5626005	BCIKHS105	2071826	CESSNA150	2072716	CESSNA182
5626006	BCIKHS105	2071828	CESSNA150	2072718	CESSNA182
4230101	BBBEBODR125	2071830	CESSNA150	2072722	CESSNA182
4230106	BBBEBODR125	2071831	CESSNA150	2072724	CESSNA182
4230110	BBBEBODR125	2071835	CESSNA150	2072726	CESSNA182
4230126	BBBEBODR125	2071836	CESSNA150	2072728	CESSNA182
4230138	BBBEBODR125	2072302	CESSNA170	2072730	CESSNA182
4230139	BBBEBODR125	2072304	CESSNA170	2072731	CESSNA182
423013P	BBBEBODR125	2072306	CESSNA170	2072732	CESSNA182
4230140	BBBEBODR125	2072202	CESSNA172	2072734	CESSNA182
4490102	BBBEBOS128	2072402	CESSNA172	2072735	CESSNA182
1461202	BBESTBFLET2	2072404	CESSNA172	2072736	CESSNA182
1461204	BBESTBFLET2	2072406	CESSNA172	2075802	CESSNA182
1461502	BBESTBFLET7	2072408	CESSNA172	2075806	CESSNA182
1461504	BBESTBFLET7	2072410	CESSNA172	2075814	CESSNA182
1461506	BBESTBFLET7	2072412	CESSNA172	2075816	CESSNA182
1461512	BBESTBFLET7	2072413	CESSNA172	2072802	CESSNA185
1461514	BBESTBFLET7	2072414	CESSNA172	2072804	CESSNA185
1461516	BBESTBFLET7	2072416	CESSNA172	2072806	CESSNA185
1590104	BUKER 131	2072417	CESSNA172	2072808	CESSNA185
1590114	BUKER 131	2072418	CESSNA172	2072812	CESSNA185
1880104	CABBOBMODELC	2072420	CESSNA172	2072816	CESSNA185
1880106	CABBOBMODELO	2072421	CESSNA172	2072818	CESSNA185
1880108	CABBOBMODELO	2072424	CESSNA172	2072820	CESSNA185
1980110	CABBOBMODELO	2072425	CESSNA172	2072821	CESSNA185
1980112	CABBOBMODELO	2072426	CESSNA172	2073002	CESSNA188
1880113	CABBOBMODELO	2072428	CESSNA172	2073004	CESSNA188
1880120	CABBOBMODELC	2072429	CESSNA172	2073005	CESSNA188
1880122	CABBOBMODELO	2072430	CESSNA172	2073006	CESSNA188
1880201	CABBOBMODELO	2072431	CESSNA172	2073007	CESSNA188
1980202	CABBOBMODELO	2072432	CESSNA172	2073008	CESSNA188
1880203	CABBOBMODELO	2072434	CESSNA172	2073010	CESSNA188
1880204	CABBOBMODELO	2072436	CESSNA172	2073012	CESSNA188
1181061	CCOPTB47ERLL	2072438	CESSNA172	2072902	CESSNA190
1181062	CCOPTB47ERLL	2072443	CESSNA172	2073102	CESSNA195
1181069	CCOPTB47ERLL	2072502	CESSNA175	2073104	CESSNA195
2390100	CCOPTB47ERLL	2072504	CESSNA175	2073106	CESSNA195
2390101	CCOPTB47ERLL	2072506	CESSNA175	2073108	CESSNA195
2390102	CCOPTB47ERLL	2072508	CESSNA175	2073110	CESSNA195
2390202	CCOPTB47ERLL	2073704	CESSNA177	2073112	CESSNA195
2390204	CCOPTB47ERLL	2073706	CESSNA177	2073302	CESSNA206

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
2073304	CESSNA206	2074001	CESSNA305	2075721	CRESSNA337
2073306	CESSNA206	2074002	CESSNA305	2075723	CESSNA337
2073308	CESSNA206	2074003	CESSNA305	2075724	CESSNA337
2073309	CESSNA206	2074004	CESSNA305	2075725	CRESSNA337
2073310	CESSNA206	2074005	CESSNA305	2075726	CESSNA337
2073311	CESSNA206	2074006	CESSNA305	2075727	CRESSNA337
2073312	CESSNA206	2074008	CESSNA305	2075730	CESSNA337
2073313	CESSNA206	2074010	CESSNA305	2075731	CESSNA337
2073316	CESSNA206	2074012	CESSNA305	2075732	CRESSNA337
2073317	CESSNA206	2074014	CESSNA305	2075733	CESSNA337
2073318	CESSNA206	2074016	CESSNA305	2076404	CESSNA340
2073319	CESSNA206	2074018	CESSNA305	2076405	CRESSNA340
2073322	CESSNA206	2074028	CESSNA305	207590C	CRESSNA401
2073324	CESSNA206	2074030	CESSNA305	207590D	CRESSNA401
2073332	CESSNA206	2074032	CESSNA305	207590E	CRESSNA401
2073333	CESSNA206	207408D	CESSNA305	207590K	CRESSNA402
2073334	CESSNA206	207408E	CESSNA305	207590L	CESSNA402
2073338	CESSNA206	207408K	CESSNA305	207590M	CRESSNA402
2073340	CESSNA206	2074202	CESSNA310	207590P	CRESSNA402
2073342	CESSNA206	2074204	CESSNA310	207590R	CESSNA402
2073344	CESSNA206	2074206	CESSNA310	2075901	CRESSNA404
2073346	CESSNA206	2074208	CESSNA310	2075902	CESSNA411
2073348	CESSNA206	2074210	CESSNA310	2075904	CRESSNA411
2073350	CESSNA206	2074212	CESSNA310	2075907	CESSNA414
2073352	CESSNA206	2074214	CESSNA310	2075909	CESSNA414
2073353	CESSNA206	2074216	CESSNA310	2076010	CESSNA421
2073356	CESSNA206	2074218	CESSNA310	2076012	CESSNA421
2073357	CESSNA206	2074220	CESSNA310	2076014	CESSNA421
2073602	CESSNA207	2074222	CESSNA310	2076016	CRESSNA421
2073604	CESSNA207	2074224	CESSNA310	2076020	CESSNA441
2073612	CESSNA207	2074226	CESSNA310	2076602	CESSNA500
2073614	CESSNA207	2074228	CESSNA310	2076604	CESSNA500
2073202	CESSNA210	2074230	CESSNA310	2071302	CESSNA150
2073204	CESSNA210	2074234	CESSNA310	2071304	CESSNA150
2073402	CESSNA210	2074236	CESSNA310	2071305	CESSNA150
2073403	CESSNA210	2074238	CESSNA310	2071306	CESSNA150
2073404	CESSNA210	2074240	CESSNA310	2071307	CESSNA150
2073406	CESSNA210	2074242	CESSNA310	2071308	CESSNA150
2073408	CESSNA210	2074244	CESSNA310	2070802	CRESSNAUC77
2073410	CESSNA210	2074245	CESSNA310	2070702	CRESSNAUC77
2073412	CESSNA210	2074246	CESSNA310	2079704	CRESSNAUC77
2073414	CESSNA210	2074502	CESSNA320	2070802	CRESSNAUC77
2073416	CESSNA210	2074504	CESSNA320	2070904	CRESSNAUC77
2073418	CESSNA210	2074506	CESSNA320	2070806	CRESSNAUC77
2073422	CESSNA210	2074508	CESSNA320	2070902	CRESSNAUC94
2073430	CESSNA210	2074510	CESSNA320	2071102	CRESSNAUC94
2073432	CESSNA210	2074512	CESSNA320	2071102	CRESSNAUC94
2073436	CESSNA210	2074514	CESSNA320	2071104	CRESSNAUC94
2073438	CESSNA210	2074515	CESSNA320	0110201	CB1LD S2
2073439	CESSNA210	2075000	CESSNA337	2370602	COBETH185
2073440	CESSNA210	2075004	CESSNA337	2370604	COBETH185
2073446	CESSNA210	2075701	CESSNA337	2370608	COBETH185
2073447	CESSNA210	2075703	CESSNA337	2400102	CCBAE81A4
2073448	CESSNA210	2075704	CESSNA337	2400108	CCBAE81A4
2073449	CESSNA210	2075706	CESSNA337	2400110	CCBAE81A4
2073450	CESSNA210	2075707	CESSNA337	5110102	CCBAE81A4
2073451	CESSNA210	2075708	CESSNA337	5110104	CCBAE81A4
2073453	CESSNA210	2075712	CESSNA337	5110202	CCBAE81A4
2073454	CESSNA210	2075714	CESSNA337	5110204	CCBAE81A4
2073456	CESSNA210	2075717	CESSNA337	5110302	CCBAE81A4
2073502	CESSNA305	2075719	CESSNA337	5110304	CCBAE81A4

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
5110306	CCBAEELA4	2621808	CUBTISIEVABIB	2422904	CVAC 448
5110308	CCBAEELA4	2621810	CUBTISIEVABIR	2423004	CVAC 440
5110310	CCBAEELA4	2621812	CUBTISIEVAIR	2420202	CVAC ET13
5110312	CCBAEELA4	2621814	CUBTISIEVABIR	2420204	CVAC ET13
5110314	CCBAEELA4	2621816	CUBTISIEVABAIR	2420206	CVAC ET13
5110316	CCBAEELA4	2621818	CUBTISIEVAIR	2420208	CVAC ET13
2622601	CUBTISC46	2621820	CUBTISIEVABIR	2420210	CVAC ET13
2622602	CUBTISC46	2621822	CUBTISIEVABIR	2420222	CVAC ET13
2622604	CUBTISC46	2621824	CUBTISIEVABIR	2420224	CVAC ET13
2622606	CUBTISC46	2621826	CUBTISIEVABIR	2420226	CVAC ET13
2622608	CUBTISC46	2621828	CUBTISIEVABIR	2420228	CVAC ET13
2622610	CUBTISC46	2621830	CUBTISIEVABIR	2420230	CVAC ET13
2622628	CUBTISC46	2621832	CUBTISIEVABIR	2420702	CVAC L12
2622701	CUBTISC46	2621902	CUBTISIEVABIR	2420704	CVAC L13
2622702	CUBTISC46	2621904	CUBTISIEVABIR	2420706	CVAC L13
2622704	CUBTISC46	2621906	CUBTISIEVABIB	*SIC580	CVAC SIC580
2622706	CUBTISC46	2621908	CUBTISIEVABIB	2422801	CVAC SIC580
2622709	CUBTISC46	2423302	CVAC 22	2422802	CVAC SIC580
2622710	CUBTISC46	2423304	CVAC 22	2422804	CVAC SIC580
2622750	CUBTISC46	3790104	CVAC 22	2422906	CVAC SIC580
2620502	CUBTISJB	2422601	CVAC 240	2423001	CVAC SIC580
2620802	CUBTISBOPIN	2422602	CVAC 240	2423002	CVAC SIC580
2620804	CUBTISBOPIN	2422604	CVAC 240	2700102	DART G
2620806	CUBTISBOPIN	2422606	CVAC 240	2700104	DART G
2620808	CUBTISBOPIN	2422608	CVAC 240	2700106	DART G
2620810	CUBTISBOPIN	2422610	CVAC 240	2700113	DART G
2620812	CUBTISBOPIN	2422612	CVAC 240	2801702	DRAV EHC1
2620814	CUBTISBOPIN	2422614	CVAC 240	2801704	DRAV EHC1
2621002	CUBTISIEVABIR	2422616	CVAC 240	2801712	DRAV EHC1
2621004	CUBTISIEVABIR	2422618	CVAC 240	2801714	DRAV EHC1
2621006	CUBTISIEVABIR	2422620	CVAC 240	2801716	DRAV EHC1
2621008	CUBTISIEVABIR	2422622	CVAC 240	2801736	DRAV EHC1
2621010	CUBTISIEVABIR	2422624	CVAC 240	2801738	DRAV EHC1
2621012	CUBTISIEVABIR	2422626	CVAC 240	2901739	DRAV EHC1
2621102	CUBTISIEVABIR	2422628	CVAC 240	*DRC2	DRAV EHC2
2621104	CUBTISIEVABIR	2422630	CVAC 240	2800102	DRAV EHC2
2621106	CUBTISIEVABIR	2422632	CVAC 240	2800103	DRAV EHC2
2621108	CUBTISIEVABIR	2422633	CVAC 240	2800104	DRAV EHC2
2621202	CUBTISIEVABIR	2422634	CVAC 240	2900105	DRAV EHC2
2621204	CUBTISIEVABIR	2422636	CVAC 240	2800106	DRAV EHC2
2621302	CUBTISIEVABIR	2422638	CVAC 240	2800117	DRAV EHC2
2621304	CUBTISIEVABIR	2422640	CVAC 240	2800108	DRAV EHC2
2621306	CUBTISIEVABIR	2422642	CVAC 240	2800109	DRAV EHC2
2621308	CUBTISIEVABIR	2422644	CVAC 240	2800115	DRAV EHC2
2621402	CUBTISIEVABIR	2422645	CVAC 240	2801930	DRAV EHC2
2621404	CUBTISIEVABIR	2422646	CVAC 240	2801832	DRAV EHC2
2621406	CUBTISIEVABIR	2422647	CVAC 240	2801000	DRAVXXCHC2
2621408	CUBTISIEVABIR	2422648	CVAC 240	2801002	DRAVXXCHC2
2621502	CUBTISIEVABIR	2422702	CVAC 340	2801036	DRAVXXCHC2
2621504	CUBTISIEVABIR	2422704	CVAC 340	2801020	DRAVXXCHC2
2621506	CUBTISIEVABIR	2422706	CVAC 340	3020502	DCUG 826
2621508	CUBTISIEVABIR	2422708	CVAC 340	3020504	DOUG 826
2621602	CUBTISIEVABIR	2422701	CVAC 340	3020536	DCUG 826
2621604	CUBTISIEVABIR	2422708	CVAC 340	3020510	DOUG 826
2621606	CUBTISIEVABIR	2422712	CVAC 340	3020512	DOUG 826
2621608	CUBTISIEVABIR	2422714	CVAC 340	3020514	DOUG 826
2621702	CUBTISIEVABIR	2422716	CVAC 340	3020516	DCUG 826
2621704	CUBTISIEVABIR	2422718	CVAC 340	3020518	DOUG 826
2621802	CUBTISIEVABIR	2422782	CVAC 340	3020524	DOUG 826
2621804	CUBTISIEVABIR	2422750	CVAC 440	3020525	DOUG 826
2621806	CUBTISIEVABIR	2422902	CVAC 440	3020526	DOUG 826

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR	
3020527	DOUG	EC6		3021468	DOUG	EC3
30210	DOUG	DC10		3021469	DOUG	EC3
3022110	DOUG	EC10		3021470	DOUG	DC3
3022111	DOUG	EC10		3021471	DOUG	EC3
3022114	DOUG	EC10		3021472	DOUG	EC3
3023001	DOUG	DC10		3021473	DOUG	EC3
3023501	DOUG	EC10		3021474	DOUG	EC3
3023503	DOUG	DC10		3021475	DOUG	EC3
3023508	DOUG	EC10		3021476	DOUG	EC3
3021401	DOUG	EC3		3021477	DOUG	DC3
3021402	DCUG	EC3		3021478	DOUG	EC3
3021404	DOUG	EC3		3021479	DOUG	EC3
3021406	DOUG	EC3		3021480	DOUG	DC3
3021410	DOUG	DC3		3021481	DOUG	EC4
3021412	DCUG	EC3		3021482	DOUG	EC4
3021414	DOUG	EC3		3021483	DOUG	EC4
3021416	DCUG	EC3		3021484	DOUG	EC4
3021418	DOUG	EC3		3021485	DOUG	EC4
3021420	DOUG	EC3		3021486	DOUG	EC4
3021422	DOUG	EC3		3021487	DOUG	EC4
3021424	DCUG	EC3		3021488	DOUG	EC4
3021425	DOUG	DC3		3021489	DOUG	EC4
3021426	DCUG	EC3		3021490	DOUG	EC4
3021427	DOUG	EC3		3021491	DOUG	EC4
3021428	DCUG	EC3		3021492	DOUG	EC4
3021429	DOUG	DC3		3021493	DOUG	EC4
3021430	DOUG	EC3		3021494	DOUG	EC4
3021431	DOUG	EC3		3021495	DOUG	EC4
3021432	DCUG	EC3		3021496	DOUG	EC4
3021433	DOUG	DC3		3021497	DOUG	EC4
3021434	DOUG	EC3		3021498	DOUG	EC4
3021436	DOUG	DC3		3021499	DOUG	EC4
3021438	DCUG	EC3		3021500	DOUG	EC4
3021439	DOUG	DC3		3021501	DOUG	EC4
3021440	DOUG	EC3		3021502	DOUG	EC4
3021441	DOUG	EC3		3021503	DOUG	EC4
3021442	DOUG	EC3		3021504	DOUG	EC4
3021443	DCUG	EC3		3021505	DOUG	EC4
3021444	DOUG	EC3		3021506	DOUG	EC4
3021445	DCUG	EC3		3021507	DOUG	EC4
3021446	DOUG	DC3		3021508	DOUG	EC4
3021447	DOUG	EC3		3021509	DOUG	EC4
3021448	DOUG	EC3		3021510	DOUG	EC4
3021449	DCUG	EC3		3021511	DOUG	EC4
3021450	DOUG	DC3		3021512	DOUG	EC4
3021451	DCUG	EC3		3021513	DOUG	EC4
3021452	DOUG	DC3		3021514	DOUG	EC4
3021453	DCUG	EC3		3021515	DOUG	EC4
3021454	DOUG	DC3		3021516	DOUG	EC4
3021455	DCUG	EC3		3021517	DOUG	EC4
3021456	DOUG	EC3		3021518	DOUG	EC4
3021457	DOUG	EC3		3021519	DOUG	EC4
3021458	DOUG	DC3		3021520	DOUG	EC4
3021459	DOUG	EC3		3021521	DOUG	EC4
3021460	DOUG	EC3		3021522	DOUG	EC4
3021461	DCUG	EC3		3021523	DOUG	EC4
3021462	DOUG	DC3		3021524	DOUG	EC4
3021463	DCUG	EC3		3021525	DOUG	EC4
3021464	DOUG	EC3		3021526	DOUG	EC4
3021466	DOUG	EC3		3021527	DOUG	EC4
3021467	DCUG	EC3		3021528	DOUG	EC4
				3021529	DOUG	EC4
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				3021531	DOUG	EC4
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				3021678	DOUG	EC4
				3021679	DOUG	EC4
				3021680	DOUG	EC4
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TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
5760134	E1EVCH20	3370622	FRCHLD24	3960103	GRUHAVB21
5760202	E1EVCH20	3370624	FRCHLD24	3960502	GRUHAVB21
5760204	E1EVCH20	3370626	FRCHLD24	4F32005	GRUHAVB25
5760206	E1EVCH20	3370628	FRCHLD24	3960104	GRUHAVB25
5760207	E1EVCH20	3372102	FRCHLDC119	3960105	GRUHAVB25
3280103	EMAIR HA1	3372106	FRCHLDC119	3952801	GRUHAVG164
6010102	EMAIR HA1	3372105	FRCHLDC119	3960201	GRUHAVG164
3280122	EPE 110	3373002	FRCHLDF27	3960202	GRUHAVG164
3260124	EPE 110	3373004	FRCHLDF27	3960203	GRUHAVG164
3300404	ENSTRMF28	3373036	FRCHLDF27	9012214	GRUHAVG164
3300416	ENSTRMF28	3373038	FRCHLDF27	9012215	GRUHAVG164
3300407	ENSTRMF28	3373010	FRCHLDF27	3951202	GRUHAVG21
3300424	ENSTRMF28	3373010	FRCHLDF27	3951204	GRUHAVG21
3300512	ENSTRMF28	3371602	FRCHLDE62	0630610	GUISTHAA1
3300505	ENSTRMF28	3371604	FRCHLDE62	0630710	GUISTHAA1
3300507	ENSTRMF28	3371606	FRCHLDE62	0631206	GUISTHAA1
3480502	FLEET 16E	3371608	FRCHLDE62	0631214	GUISTHAA1
3480504	FLEET 16E	3371609	FRCHLDE62	0631410	GUISTHAA5
3370202	FRCHLD24	3371610	FRCHLDE62	3560105	GUISTHAA5
3370204	FRCHLD24	3371612	FRCHLDE62	3960106	GUISTHAA5
3370206	FRCHLD24	3371614	FRCHLDE62	3960107	GUISTHAA5
3370208	FRCHLD24	3371616	FRCHLDE62	3960124	GUISTHAA5
3370211	FRCHLD24	3371618	FRCHLDE62	3570104	GUISTHAA5
3370212	FRCHLD24	3371620	FRCHLDE62	3370106	GUISTHAA5
3370214	FRCHLD24	3371622	FRCHLDE62	*G1155	GUISTHIG1159
3370216	FRCHLD24	3371624	FRCHLDE62	3953505	GUISTHIG1159
3370218	FRCHLD24	3371626	FRCHLDE62	3901018	GUISTHIG1159
3370220	FRCHLD24	3371629	FRCHLDE62	3952202	GUISTHIG159
3370222	FRCHLD24	3371630	FRCHLDE62	3952702	GUISTHIG164
3370224	FRCHLD24	3371632	FRCHLDE62	3952704	GUISTHIG164
3370302	FRCHLD24	3371634	FRCHLDE62	3952802	GUISTHIG164
3370304	FRCHLD24	3371636	FRCHLDE62	3952803	GUISTHIG164
3370402	FRCHLD24	3371638	FRCHLDE62	3979908	GUISTHIG164
3370414	FRCHLD24	3371640	FRCHLDE62	3951502	GUISTHIG44
3370406	FRCHLD24	3371642	FRCHLDE62	3951504	GUISTHIG44
3370408	FRCHLD24	3374004	FRCHLDE62	3951506	GUISTHIG44
3370410	FRCHLD24	3374016	FRCHLDE62	3951508	GUISTHIG44
3370412	FRCHLD24	3760102	GERALAXE	3951802	GUISTHIG73
3370414	FRCHLD24	3760202	GERALAXE	3960401	GUISTHIG7
3370416	FRCHLD24	3800335	GIASFLLIEELL	4300302	RELIC R25
3370418	FRCHLD24	3800337	GIASFLLIEELL	4300802	RELIC R295
3370502	FRCHLD24	3909337	GIASFLLIEELL	4300893	RELIC R295
3370504	FRCHLD24	3800341	GIASFLLIEELL	4301101	RELIC R295
3370506	FRCHLD24	3800344	GIASFLLIEELL	4301102	RELIC R295
3370508	FRCHLD24	3809346	GIASFLLIEELL	4301104	RELIC R295
3370510	FRCHLD24	1660104	GRCB ASTIR	4300102	RELIC R391
3370512	FRCHLD24	3910101	GRILKS2T1	4300104	RELIC R391
3370514	FRCHLD24	3910102	GRILKS2T1	4300106	RELIC R391
3370516	FRCHLD24	3910104	GRILKS2T1	4300292	RELIC R395
3370518	FRCHLD24	3910106	GRILKS2T1	4300204	RELIC R395
3370520	FRCHLD24	3910107	GRILKS2T1	4300206	RELIC R395
3370602	FRCHLD24	3910108	GRILKS2T1	3376502	HILLEB1100
3370604	FRCHLD24	3950306	GRUANTHE	4360102	HILLEB112
3370616	FRCHLD24	3950370	GRUANTHE	4360103	HILLEB112
3370609	FRCHLD24	3950310	GRUANTHE	4360104	HILLEB112
3370610	FRCHLD24	3630920	GRUHAVB21	4360105	HILLEB112
3370612	FRCHLD24	3621202	GRUHAVB21	4360106	HILLEB112
3370614	FRCHLD24	3632001	GRUHAVB21	4360107	HILLEB112
3370616	FRCHLD24	3560100	GRUHAVB21	4360108	HILLEB112
3370618	FRCHLD24	3960101	GRUHAVB21	4360109	HILLEB112
3370620	FRCHLD24	3960102	GRUHAVB21	4360110	HILLEB112

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
4360111	HILLEBUR12	4230130	HWESLYER125	5265010	LKEBED1011
4360112	HILLEBUR12	4230134	HWESLYDR125	5265015	LKEFED1011
4360113	HILLEBUR12	4230159	HWKSLYCH125	5265020	LKEBED1011
4360114	HILLEBUR12	4230160	HWKSLYDH125	5261402	LKEFED128
4360115	HILLEBUR12	4230179	HWKSLYCH125	5261404	LKEBED128
4360116	HILLEBUR12	1440502	HYBES E2	5261406	LKEFED128
4360117	HILLEBUR12	1440504	HYBES E2	5261408	LKEBED128
4360118	HILLEBUR12	1440506	HYBES E2	5261410	LKEFED128
4360119	HILLEBUR12	1440503	HYBES E2	*1328	LKEBED1329
4360120	HILLEBUR12	0142002	ISRAEL 1121	5263102	LKEBED1329
4360121	HILLEBUR12	0142006	ISRAEL 1121	5263104	LKEFED1329
4360122	HILLEBUR12	0142010	ISRAEL 1121	5263106	LKEBED1329
4360124	HILLEBUR12	*1123	ISRAEL 1123	5263108	LKEFED1329
4360125	HILLEBUR12	4501101	ISRAEL 1123	5263110	LKEBED1329
4360126	HILLEBUR12	*1124	ISRAEL 1124	5263116	LKEFED1329
4360127	HILLEBUR12	4500102	ISRAEL 1124	5263119	LKEBED1329
4360128	HILLEBUR12	4690502	JEESTREGA15	5263125	LKEFED1329
4360129	HILLEBUR12	4690504	JEESTREGA15	5261602	LKEBED18
4360130	HILLEBUR12	4690506	JEESTREGA15	5261603	LKEFED18
4360135	HILLEBUR12	4690508	JEESTREGA15	5261604	LKEBED18
4360209	HILLEBUR12	4690510	JEESTREGA15	5261606	LKEFED18
4470432	HUGHES269	4690512	JEESTREGA15	5261608	LKEBED18
4470403	HUGHES269	4670514	JEESTREGA15	5261610	LKEFED18
4470404	HUGHES269	4690516	JEESTREGA15	5261612	LKEFED18
4470406	HUGHES269	4670518	JEESTREGA15	5261614	LKEFED18
4470592	HUGHES269	8850402	KUBLONE	5261616	LKEBED18
4470504	HUGHES269	8850406	KUBLONE	5261618	LKEFED18
4470702	HUGHES369	8850408	KUBLONE	5261620	LKEBED18
4470704	HUGHES369	8850410	KUBLONE	5261622	LKEFED18
4470706	HUGHES369	8850412	KUBLONE	5261624	LKEBED18
4470718	HUGHES369	8850414	KUBLONE	5261632	LKEFED18
4470720	HUGHES369	8850416	KUBLONE	5261634	LKEBED18
4470722	HUGHES369	8850418	KUBLONE	5261636	LKEFED18
4470723	HUGHES369	8850420	KUBLONE	5261638	LKEBED18
4470730	HUGHES369	8850422	KUBLONE	5261640	LKEFED18
4470802	HUGHES369	5050204	LAIKF#10	5261642	LKEBED18
4470806	HUGHES369	5090206	LAIKF#10	5262602	LKEFED188
4470905	HUGHES369	5090208	LAIKF#10	5262604	LKEBED188
*DH104	HURSLYDH104	5170102	LEAR 23	5264102	LKEFED382
2800402	HURSLYCH104	5170302	LEAR 24	5264104	LKEBED382
2800404	HURSLYCH104	5170304	LEAR 24	5264110	LKEFED382
2800406	HURSLYCH104	5170306	LEAR 24	5264118	LKEBED382
2800408	HURSLYCH104	5170307	LEAR 24	5264119	LKEFED392
2800410	HURSLYCH104	5170308	LEAR 24	5264128	LKEBED382
2800412	HURSLYCH104	5170309	LEAR 24	5264130	LKEFED392
2800414	HURSLYCH104	5170310	LEAR 24	5264140	LKEBED382
2800416	HURSLYCH104	5170311	LEAR 24	5264142	LKEFED392
2800417	HURSLYCH104	5170316	LEAR 24	5260192	LKEBED382
2900418	HURSLYCH104	5170317	LEAR 24	5260196	LKEFED382
2800420	HURSLYDH104	5170506	LEAR 25	5260106	LKEBED382
*DR114	HURSLYCH114	5170502	LEAR 25	5260401	LKEFED33
2800501	HURSLYDH114	5170511	LEAR 25	5260402	LKEBED33
2800502	HURSLYDH114	5170513	LEAR 25	5260404	LKEFED33
2800504	HURSLYCH114	5170518	LEAR 25	5260406	LKEBED33
2800506	HURSLYCH114	5170516	LEAR 25	8190102	LUSCONE
2800509	HURSLYCH114	5170600	LEAR 35	8190104	LUSCONE
2800510	HURSLYDH114	5170601	LEAR 35	8190106	LUSCONE
*DR125	HURSLYCH125	5170602	LEAR 35	8190108	LUSCONE
4210112	HURSLYCH125	5170603	LEAR 35	8190110	LUSCONE
4230102	HURSLYDH125	1360306	LET 113	8190112	LUSCONE
4230112	HURSLYCH125	*1011	LKEBED1011	8190114	LUSCONE

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
8190116	LUSCONE	5870304	MCCNEYH20	6400407	WAHER 16
8190118	LUSCONE	5870306	MCCNEYH20	6400408	WAHER 16
8190120	LUSCONE	5870308	MCCNEYH20	6400410	WAHER 16
8190122	LUSCONE	5870310	MCCNEYH20	6400412	WAHER 16
8190124	LUSCONE	5870312	MCCNEYH20	6400414	WAHER 16
8190126	LUSCONE	5870314	MCCNEYH20	6400415	WAHER 16
8190128	LUSCONE	5870316	MCCNEYH20	6400416	WAHER 16
8190130	LUSCONE	5870601	MCCNEYH20	6400417	WAHER 16
8190132	LUSCONE	5870605	MCCNEYH20	6400418	WAHER 16
8190154	LUSCONE	9120412	MRCAT15205	6400419	WAHER 16
9190192	LUSCONE	5780404	M1SESIP02	6400420	WAHER 16
5460702	MARTIN404	5780405	M1SSSIM02	6400422	WAHER 16
5460102	MAULE 24	5780406	M1SSSIM02	6400423	WAHER 16
5460104	MAULE 24	5780407	M1SSSIM02	6400424	WAHER 16
5460105	MAULE 24	5780408	M1SSSIM02	6400426	WAHER 16
5460106	MAULE 24	5780409	M1SSSIM02	6400430	WAHER 16
5460108	MAULE 24	5780410	M1SSSIM02	6400431	WAHER 16
5460112	MAULE 24	5780411	M1SSSIM02	6400432	WAHER 16
5461114	MAULE 24	5780412	M1SSSIM02	6400434	WAHER 16
5461116	MAULE 24	5780413	M1SSSIM02	6400436	WAHER 16
5461128	MAULE 24	5780414	M1SSSIM02	6400441	WAHER 16
5460130	MAULE 24	5780415	M1SSSIM02	6400442	WAHER 16
5460132	MAULE 24	5780460	M1SSSIM02	6120202	NAVAL 138
5460133	MAULE 25	9230602	MULTEC16	6150118	NAVICNAVION
5460134	MAULE 25	9230604	MULTEC16	6150132	NAVICNAVION
5460135	MAULE 25	9230606	MULTEC16	6150134	NAVICNAVION
5460204	MACLE 25	9230608	MULTEC16	6150136	NAVICNAVION
5480102	MCIISHFUNKB	9230610	MULTEC16	6150138	NAVICNAVION
5480104	MCIISHFUNKB	9230612	MULTEC16	6150140	NAVICNAVION
5480106	MCIISHFUNKB	6400702	WAHER E25	6150142	NAVICNAVION
5480138	MCIISHFUNKB	6400704	WAHER E25	6150144	NAVICNAVION
5480202	MCIISHFUNKB	6400705	WAHER E25	6150148	NAVICNAVION
5480204	MCIISHFUNKB	6400706	WAHER E25	6150160	NAVICNAVION
5480206	MCIISHFUNKB	6400708	WAHER E25	6150162	NAVICNAVION
5480208	MCIISHFUNKB	6400710	WAHER E25	6150164	NAVICNAVION
5650202	MEYERSCTH	6400712	WAHER E25	6150166	NAVICNAVION
5650204	MEYERSCTH	6400713	WAHER E25	6150168	NAVICNAVION
5650206	MEYERSCTH	6400714	WAHER E25	6150170	NAVICNAVION
5650208	MEYERSCTH	6400718	WAHER E25	6150172	NAVICNAVION
5810102	MCCOUP90	6400719	WAHER E25	6150174	NAVICNAVION
5810104	MCCOUP90	6402301	WAHER F51	6150176	NAVICNAVION
5810107	MCCOUP90	6402302	WAHER F51	6150178	NAVICNAVION
5810108	MCCOUP90	6402303	WAHER F51	6383006	MCSD SVA
5810110	MCCOUP90	6402304	WAHER F51	8141608	OF1BELM18
5810130	MCCOUP90	6402305	WAHER F51	8141609	OF1BELM19
5870101	MHEITEM18	6402306	WAHER F51	8141610	OF1BELM19
5870102	MHEITEM18	6402307	WAHER F51	8141612	OF1BELM19
5870104	MHEITEM18	6402308	WAHER F51	8141614	OF1BELM19
5870106	MHEITEM18	6402309	WAHER F51	8141616	OF1BELM19
5870109	MHEITEM18	6402310	WAHER F51	8141618	OF1BELM19
5870202	MCCNEYH20	6402314	WAHER F51	056040H	PICAREX6
5870204	MCCNEYH20	6402502	WAHER EA260	7001218	PICAREX6
5870206	MCCNEYH20	6402504	WAHER EA260	7001221	PICAREX6
5870208	MCCNEYH20	6402505	WAHER EA260	7090103	PILATSE4
5870210	MCCNEYH20	6402506	WAHER EA260	7090104	PILATSE4
5870212	MCCNEYH20	6402512	WAHER EA260	7106001	PIPER 600
5870214	MCCNEYH20	1922828	WAHER T6	7106002	PIPER 600
597J216	MCCNEYH20	6400402	WAHER T6	7106010	PIPER 600
5870219	MCCNEYH20	6400404	WAHER T6	7106011	PIPER 600
5870220	MCCNEYH20	6400405	WAHER T6	8360604	PIPER 600
5870302	MCCNEYH20	6400406	WAHER T6	8360605	PIPER 600

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
3360607	PIPER 600	7101202	PIPER PA12	7102803	PIPER PA24
8360608	PIPER 600	7101204	PIPER PA12	7102404	PIPER PA24
7100402	PIPER J2	7101402	PIPER PA14	7102406	PIPER PA24
7100412	PIPER J2	7101502	PIPER PA15	7102407	PIPER PA24
7100501	PIPER J3	7101602	PIPER PA16	7102408	PIPER PA24
7100502	PIPER J3	7101604	PIPER PA16	7102409	PIPER PA24
7100503	PIPER J3	7101702	PIPER PA17	7102502	PIPER PA25
7100508	PIPER J3	7101802	PIPER PA18	7102503	PIPER PA25
7100506	PIPER J3	7101804	PIPER PA18	7102504	PIPER PA25
7100508	PIPER J3	7101806	PIPER PA18	7102508	PIPER PA25
7100510	PIPER J3	7101809	PIPER PA18	7102510	PIPER PA28
7100511	PIPER J3	7101910	PIPER PA19	7102801	PIPER PA28
7100512	PIPER J3	7101911	PIPER PA18	7102802	PIPER PA28
7100514	PIPER J3	7101912	PIPER PA18	7102803	PIPER PA28
7100516	PIPER J3	7101913	PIPER PA18	7102904	PIPER PA28
7100513	PIPER J3	7101914	PIPER PA18	7102805	PIPER PA28
7100519	PIPER J3	7101915	PIPER PA18	7102806	PIPER PA28
7100520	PIPER J3	7101916	PIPER PA18	7102807	PIPER PA28
7100521	PIPER J3	7101916	PIPER PA18	7102808	PIPER PA28
7100522	PIPER J3	7101820	PIPER PA18	7102809	PIPER PA28
7100524	PIPER J3	7101822	PIPER PA18	7102810	PIPER PA28
7100525	PIPER J3	7101824	PIPER PA18	7102811	PIPER PA28
7100526	PIPER J3	7101826	PIPER PA18	7102812	PIPER PA28
7100527	PIPER J3	7101828	PIPER PA18	7102813	PIPER PA28
7100528	PIPER J3	7101930	PIPER PA18	7102814	PIPER PA28
7100529	PIPER J3	7101832	PIPER PA18	7102815	PIPER PA28
7100520	PIPER J3	7101934	PIPER PA18	7102816	PIPER PA28
7100525	PIPER J3	7101836	PIPER PA18	7102817	PIPER PA28
7100521	PIPER J3	7101937	PIPER PA18	7102818	PIPER PA28
7100531	PIPER J3	7101838	PIPER PA18	7102819	PIPER PA28
7100532	PIPER J3	7101902	PIPER PA18	7102924	PIPER PA28
7100534	PIPER J3	7101903	PIPER PA18	*PA30	PIPER PA30
7100536	PIPER J3	7101904	PIPER PA18	7103002	PIPER PA30
7100539	PIPER J3	7101906	PIPER PA18	7103015	PIPER PA30
7100540	PIPER J3	7102002	PIPER PA20	7103902	PIPER PA30
7100541	PIPER J3	7102004	PIPER PA20	7104002	PIPER PA30
7100542	PIPER J3	7102006	PIPER PA20	*PA31	PIPER PA31
7100544	PIPER J3	7102008	PIPER PA20	7103102	PIPER PA31
7100546	PIPER J3	7102010	PIPER PA20	7103104	PIPER PA31
7100548	PIPER J3	7102012	PIPER PA20	7103105	PIPER PA31
7100550	PIPER J3	7102016	PIPER PA20	7103110	PIPER PA31
7100552	PIPER J3	7102202	PIPER PA22	7103120	PIPER PA31
7101102	PIPER J3	7102203	PIPER PA22	7103124	PIPER PA31T
7101104	PIPER J3	7102204	PIPER PA22	7103126	PIPER PA31T
7100602	PIPER J4	7102206	PIPER PA22	7103206	PIPER PA32
7100604	PIPER J4	7102208	PIPER PA22	7103207	PIPER PA32
7100605	PIPER J4	7102210	PIPER PA22	7103208	PIPER PA32
7100606	PIPER J4	7102212	PIPER PA22	7103219	PIPER PA32
7100608	PIPER J4	7102214	PIPER PA22	7103210	PIPER PA32
7100610	PIPER J4	7102216	PIPER PA22	7103211	PIPER PA32
7100612	PIPER J4	*PA23	PIPER PA23	7103212	PIPER PA32
7100614	PIPER J4	7102302	PIPER PA23	7103213	PIPER PA32
7100202	PIPER J5	7102303	PIPER PA23	7103214	PIPER PA32
7100204	PIPER J5	7102304	PIPER PA23	7103215	PIPER PA32
7100702	PIPER J5	7102305	PIPER PA23	7103216	PIPER PA32
7100704	PIPER J5	7102306	PIPER PA23	7103217	PIPER PA32
7100706	PIPER J5	7102308	PIPER PA23	7103218	PIPER PA32
7100708	PIPER J5	7102309	PIPER PA23	7103220	PIPER PA32
7100710	PIPER J5	7102310	PIPER PA23	7103222	PIPER PA32
7100712	PIPER J5	7102402	PIPER PA24	*PA34	PIPER PA34
				7103404	PIPER PA34

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
7103415	PIPER PA34	0101604	RKWEIL680	3801536	SCHLEBK6
7103406	PIPER PA34	0101606	RKWEIL680	3801537	SCHLEBK6
7103407	PIPER PA34	0101608	RKWEIL680	3801540	SCHLEBK6
7103408	PIPER PA34	0101610	RKWEIL680	3801542	SCHLEBK6
7103420	PIPER PA34	0101611	RKWEIL680	3801545	SCHLEBK6
7103602	PIPER PA36	0101612	RKWEIL680	3801554	SCHLEBK6
7103610	PIPER PA36	0101612	RKWEIL680	8050101	SC62ERSG1
7103612	PIPER PA36	7630513	RKWEIL680	8050102	SC62ERSG1
7103614	PIPER PA36	0101712	RKWEIL680TP	8050103	SC62ERSG1
7103812	PIPER PA38	0101714	RKWEIL680TP	8050104	SC62ERSG1
*844	PIPER PA44	0101716	RKWEIL680TP	8050105	SC62ERSG1
7104402	PIPER PA44	0101718	RKWEIL680TP	8050106	SC62ERSG1
7300102	PBTT PRG1	0101720	RKWEIL680TP	8050107	SC62ERSG1
7300104	PBTT PRG1	0101722	RKWEIL690TP	8050108	SC62ERSG1
7300106	PBTT PRG1	7630515	RKWEIL690TP	8050110	SC62ERSG1
914J302	PRCPJT200	7630516	RKWEIL690TP	8050111	SC62ERSG1
0140304	PRCPJT200	7630517	RKWEIL690TP	8050112	SC62ERSG1
0140306	PRCPJT200	7630518	RKWEIL690TP	8050113	SC62ERSG1
0140309	PRCPJT200	7630519	RKWEIL690TP	8050114	SC62ERSG1
0140312	PRCPJT200	7630520	RKWEIL700	8050116	SC62ERSG1
0140314	PRCPJT200	48265	RKWEILNA265	8050118	SC62ERSG1
5650302	PRCPJT200	6402602	RKWEILNA265	8050120	SC62ERSG1
5650304	PRCPJT200	6402604	RKWEILNA265	8050122	SC62ERSG1
5650306	PRCPJT200	6402606	RKWEILNA265	8050124	SC62ERSG1
5650308	PRCPJT200	6402608	RKWEILNA265	8050126	SC62ERSG1
5650310	PRCPJT200	6402610	RKWEILNA265	8050128	SC62ERSG1
6480116	RABKING65	6402612	RKWEILNA265	8050147	SC62ERSG1
6480118	RABKING65	6402614	RKWEILNA265	8050148	SC62ERSG1
6480120	RABKING65	6402616	RKWEILNA265	8050149	SC62ERSG1
6480122	RABKING65	7630101	RKWEILNA265	8050151	SC62ERSG1
6480124	RABKING65	7630104	RKWEILNA265	8050501	SC62ERSG1
7480502	RAVEN S86	7630106	RKWEILNA265	8050502	SC62ERSG1
05604XT	RAVEN S50	7630107	RKWEILNA265	8050504	SC62ERSG1
05604KX	RAVEN S50	7630107	RKWEILNA265	8050515	SC62ERSG1
7480202	RAVEN S50	7640102	ROESTER22	8053604	SC62ERSG1
7480204	RAVEN S50	3801206	RCISCHLS	8050292	SC62ERSG2
7480402	RAVEN S55	3801208	RCISCHLS	8050204	SC62ERSG2
0560477	RAVEN S60	3801211	RCISCHLS	8050206	SC62ERSG2
7480604	RAVEN S60	3801213	RCISCHLS	8050207	SC62ERSG2
7480606	RAVEN S60	3801214	RCISCHLS	8050210	SC62ERSG2
7480610	RAVEN S60	7630502	RYAN ST3	8050602	SC62ERSG2
0144701	RKWEIL112	7830504	RYAN ST3	8050604	SC62ERSG2
7630302	RKWEIL112	7830506	RYAN ST3	9050606	SC62ERSG2
7630303	RKWEIL112	7830402	RYAN ST8	8050608	SC62ERSG2
7630306	RKWEIL112	7830404	RYAN ST8	8050610	SC62ERSG2
7630307	RKWEIL112	38015H2	SCLEBBSR15	8050612	SC62ERSG2
7630314	RKWEIL112	38015H2	SCLEBBSR15	8050614	SC62ERSG2
7630315	RKWEIL112	3901505	SCLEBBSR19	8051404	SC62ERSG2
7630316	RKWEIL112	3801508	SCLEBBSR19	8051604	SC62ERSG2
0141102	RKWEIL500	3801503	SCLEBBSR20	8051606	SC62ERSG2
0141104	RKWEIL500	3801506	SCLEBBSR20	9050902	SC62ERSG2
0141106	RKWEIL500	3801555	SCLEBKS	8070802	SECO CLEGER
0141107	RKWEIL500	3801563	SCLEBKS	9071701	SECO MODELT
0141108	RKWEIL500	3801567	SCLEBKS	8141602	SKBSR155
7630410	RKWEIL500	38019VK	SCLEBBS	8141634	SKBSKY555
0141202	RKWEIL520	38019VL	SCLEBBS	8141606	SKBSKY555
0141402	RKWEIL560	3801525	SCLEBKS	8141615	SKBSKY555
0141404	RKWEIL560	3801528	SCLEBBS	8141618	SKBSKY555
0141406	RKWEIL560	3801530	SCLEBKS	8141616	SKBSKY555
0141408	RKWEIL680	3801533	SCLEBKS	814161J	SKBSKY555
0141602	RKWEIL680	3801535	SCLEBKS	8141622	SKBSKY555

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
8141630	SKFSKY555	8630306	STBSON15	9230914	TCBAPTEC
8141632	SKFSKY555	8630209	STBSON15	9230916	TCBAPTEC
9141801	SKFSKY558	8630210	STBSON15	9230918	TCBAPTEC
8141802	SKFSKY559	9630212	STBSON15	9230920	TCBAPTEC
8141804	SKFSKY559	8630214	STBSON15	9230922	TCBAPTEC
8141806	SKFSKY558	8631502	STBSONSF9	9230924	TCBAPTEC
8141809	SKFSKY558	8631504	STBSONSF9	9230926	TCBAPTEC
8141811	SKFSKY558	9631506	STBSONSF9	9230928	TCBAPTEC
8141814	SKFSKY558	8631508	STBSONSF9	8850326	TCBAPTEC
8141815	SKFSKY558	8631510	STBSONSF9	8850329	TCBAPTEC
9141831	SKFSKY558	8631512	STBSONSF9	8850330	TCBAPTEC
8141836	SKFSKY558	8631514	STBSONSF9	8850332	TCBAPTEC
8141837	SKFSKY558	8631516	STBSONSF9	8850334	TCBAPTEC
8141839	SKFSKY558	8631518	STBSONSF9	8850336	TCBAPTEC
9141803	SKFSKY558T	8631520	STBSONSF9	8850338	TCBAPTEC
8141805	SKFSKY558T	8631522	STBSONSF9	8850340	TCBAPTEC
8141807	SKFSKY558T	8631524	STBSONSF9	8850342	TCBAPTEC
8141840	SKFSKY558T	8631526	STBSONSF9	8850344	TCBAPTEC
8141842	SKFSKY558T	8631528	STBSONSF9	8850346	TCBAPTEC
8143006	SKFSKY576	3090202	STCLAMFC3	8850348	TCBAPTEC
0140202	SLINDS100	3090203	STCLAMFC3	8850350	TCBAPTEC
0140203	SLINDS100	3090204	STCLAMFC3	8850352	TCBAPTEC
0140204	SLINDS100	3090206	STCLAMFC3	8850354	TCBAPTEC
0140208	SLINDS100	5010102	STCLAMFC3	8850356	TCBAPTEC
0140210	SLINDS100	8730202	SUFAC 1A	8850358	TCBAPTEC
9550102	SLINDS100	8730204	SUFAC 1A	8850402	TEMCO 11A
9550104	SLINDS100	8730206	SUFAC 1A	8850404	TEMCC 11A
9550112	SLINDS100	8730208	SUFAC 1A	8870105	THUNDERBAX7
9360602	SMITH 600	8730302	SUFAC V	8870107	THUNDERBAX7
8360604	SMITH 600	8730304	SUFAC V	8870109	THUNDERBAX7
9360605	SMITH 600	8730306	SUFAC V	8870110	THUNDERBAX7
8360606	SMITH 600	8730309	SUFAC V	6150104	THESONNAVION
9360607	SMITH 600	*SA226	SWEHGWSA226	6150106	THESONNAVION
8360802	SMITH 600	8780122	SWEHGWSA226	6150109	THESONNAVION
8360906	SMITH 600	8780404	SWEHGWSA226	6150110	THESONNAVION
8680802	SMIAS 350	8780405	SWEHGWSA226	6150112	THESONNAVION
8680903	SMIAS 350	8780406	SWEHGWSA226	6150114	THESONNAVION
8680506	SMIAS SA318	*SA26	SWEHGWSA26	6150116	THESONNAVION
8680503	SMIAS SA318	8780102	SWEHGWSA26	6150120	THESONNAVION
8680511	SMIAS SA318	8780112	SWEHGWSA26	6150122	THESONNAVION
2402802	SCCATAB894	8850202	TCBAPTEC	6150146	THESONNAVION
8400125	SOCATARALLYE	8850302	TCBAPTEC	8190402	TRYTEKK
9400131	SOCATARALLYE	8850304	TCBAPTEC	0190404	TRYTEKK
8400135	SOCATARALLYE	8850306	TCBAPTEC	9230102	UNIVACCGC1
38019VC	SPHRTHCIRROS	8850308	TCBAPTEC	9230104	UNIVACCGC1
38019VE	SPBTHCIBRTE	8850310	TCBAPTEC	9230106	UNIVACCGC1
3801923	SPHRTHKIRROS	8850312	TCBAPTEC	9230108	UNIVACCGC1
3901925	SPBTHBIEBUS	8850314	TCBAPTEC	9230110	UNIVACCGC1
38019VD	SPHRTHKIRROS	8850316	TCBAPTEC	9230112	UNIVACCGC1
38019VF	SPBTHKIRROS	8850314	TCBAPTEC	9230402	UNIVAR10P
38019VG	SPBTHKIRROS	8850320	TCBAPTEC	9230404	UNIVAR108
39019VJ	SPBTHKIRROS	8850321	TCBAPTEC	9230406	UNIVAR108
8100602	STBOSSD3	8850322	TCBAPTEC	9230408	UNIVAR108
9110112	STBOSSD3	8850323	TCBAPTEC	9230412	UNIVAR108
8632002	STBSON10	8850324	TCBAPTEC	9230414	UNIVAR108
9632004	STBSON10	9230902	TCBAPTEC	9230416	UNIVAR108
8632102	STBSON10	9230904	TCBAPTEC	9230418	UNIVAR108
8632104	STBSON10	9230906	TCBAPTEC	0420102	UNIVAR415
8632106	STBSON10	9230908	TCBAPTEC	0420104	UNIVAR415
8630202	STBSON15	9230910	TCBAPTEC	0420202	UNIVAR415
8630204	STBSON15	9230912	TCBAPTEC	0420204	UNIVAR415

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
0420302	UNIVAR415	0190714	WAGNER65		
0420304	UNIVAR415	0190716	WAGNER65		
0420306	UNIVAR415	0190718	WAGNER65		
0420308	UNIVAR415	0190920	WAGNER65		
0420310	UNIVAR415	0190922	WAGNER65		
0420312	UNIVAR415	0190924	WAGNER65		
0420314	UNIVAR415	0190926	WAGNER65		
0420316	UNIVAR415	0190928	WAGNER65		
0420318	UNIVAR415	0190930	WAGNER65		
0420320	UNIVAR415	0190932	WAGNER65		
0420322	UNIVAR415	0190934	WAGNER65		
0420324	UNIVAR415	9630404	WTHRLY201		
0420326	UNIVAR415	9630406	WTHRLY201		
0420328	UNIVAR415	9630408	WTHRLY201		
0420330	UNIVAR415	9630410	WTHRLY201		
0420332	UNIVAR415				
0420334	UNIVAR415				
0420336	UNIVAR415				
0420338	UNIVAR415				
0420340	UNIVAR415				
0420402	UNIVAR415				
0420404	UNIVAR415				
0420406	UNIVAR415				
0420408	UNIVAR415				
0420410	UNIVAR415				
0420502	UNIVAR415				
0420504	UNIVAR415				
0420702	UNIVAR415				
0420722	UNIVAR415				
0540102	UNIVAR415				
0540104	UNIVAR415				
5872014	UNIVAR415				
5872018	UNIVAR415				
594202	VDEGA 2150				
5940204	VARGA 2150				
9350102	VDEGA 2150				
9470204	VICKER745				
9470402	VICKER745				
9470404	VICKER745				
9470602	VICKER745				
9601202	WACO ASC				
9600702	WACO GXE				
9600304	WACO R				
9600422	WACO R				
9600306	WACO U				
9600434	WACO U				
9600405	WACO U				
9600514	WACO U				
9600510	WACO U				
9601302	WACO UPF7				
9601304	WACO UPF7				
9600916	WACO YK				
9600818	WACO YK				
9600832	WACO YK				
9600834	WACO YK				
9600835	WACO YK				
9600836	WACO YK				
9600839	WACO YK				
9600840	WACO YK				
0190406	WAGNER65				
0190712	WAGNER65				

APPENDIX E.

SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THIS TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL (MM) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MM CODES FOR ENGINES OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA	
ALLSN 250C	U3002	CONT	0520	17032	JACOBSSR 755	35003
ALLSN 250C	J3011	CONT	0520	17035	JACOBSSR 915	35005
ALLSN 250C	J3013	CONT	0520	17040	LYC	LTS101 4156C
ALLSN 501D	*501C	CONT	R670	17016	LYC	0145 41501
ALLSN 501D	J3024	CONT	R670	17018	LYC	0145 41502
ALLSN 501D	U3005	DHAVXXGIPSY	20004	LYC	0145 41503	
ALLSN 501D	J3006	FCR	6440	26003	LYC	0235 41505
AMTRCMCCULH	*2501	FRNKLN4AC150	27002	LYC	0290 41506	
ARSPCHTFE731	*TFE7	FRNKLN4AC150	27003	LYC	0320 41500	
ARSRCHTFE731	J1518	FRNKLN4AC150	27004	LYC	0320 41508	
ARSRCHTFE331	*TPE3	FRNKLN4AC176	27006	LYC	0320 41509	
ARSRCHTFE331	J1502	FRNKLN4AC176	27007	LYC	0340 41510	
ARSRCHTFE331	J15C6	FRNKLN4AC199	27008	LYC	0360 41504	
ARSRCHTFE331	J1508	FRNKLN4AC199	27005	LYC	0360 41511	
ARSRCHTFE331	J1510	FRNKLN4AC159	27010	LYC	0360 41513	
ARSRCHTFE331	J1512	FRNKLN6A4150	27024	LYC	0360 41514	
CONT	6285	FRNKLN6A4165	27025	LYC	0360 41515	
CONT	975	17037	FRNKLN6A420C	27027	LYC	0360 41522
CONT	A40	17001	FRNKLN6A8215	27030	LYC	0360 41524
CONT	A50	17002	FRNKLN6AV335	27020	LYC	0435 *0435
CONT	A65	17003	FRNKLN6AV350	27043	LYC	0435 41516
CONT	A75	17005	FRNKLN6V4	27033	LYC	0435 41517
CONT	A80	17006	FRNKLN6VS335	27040	LYC	0435 41518
CONT	C125	17J11	GE	CF6 *CF6	LYC	0435 41519
CONT	C145	17J12	GE	CF6 30020	LYC	0435 41520
CONT	C85	17008	GE	CF700 *CF70	LYC	0435 41521
CONT	C90	17009	GE	CF700 30010	LYC	0435 41523
CONT	E185	17J14	GE	CJ61C *CJ61	LYC	0435 41525
CONT	F225	17J15	GE	CJ610 30002	LYC	0435 41526
CONT	0200	17J20	GE	CJ610 30006	LYC	0480 41527
CONT	0300	17022	GE	CJ805 *CJ80	LYC	0480 41529
CONT	0300	17J24	GE	CJ805 30J04	LYC	0540 *0540
CONT	0346	17J33	GE	CJ805F 30005	LYC	0540 41530
CONT	0360	17023	GE	CT58 *CT58	LYC	0540 41531
CONT	0360	17J25	GE	CT58 30001	LYC	0540 41532
CONT	0470	*0470	GE	CT58 30028	LYC	0540 41533
CONT	0470	17026	GLADENK5	37503	LYC	0540 41534
CONT	0470	17027	GLADENR5	37504	LYC	0540 41535
CONT	0470	17028	JACOBPR 755	35006	LYC	0540 41538
CONT	0470	17029	JACOBPR 755	35007	LYC	0541 41536
CONT	0520	*0520	JACOBPR 755	35008		

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>
LYC 0541	41539	OTHFR	67032	RROYCEDART	54506
LYC 0720	41546	CTHER	67033	RROYCEDART	54507
LYC R680	41540	OTHFR	67034	RROYCEDART	54508
LYC R680	41541	CTHER	67037	RROYCEDART	54509
LYC R680	41542	OTHFR	67038	RROYCEDART	54522
LYC R680	41543	CTHER	67050	RROYCEDART	54553
LYC R680	41544	CTHER	69999	RROYCEGIPSY	20005
LYC R680	41545	PCKARDV1650	49001	RROYCEGIPSY	20006
LYC T53	41552	PWA JT12	*JT12	RROYCEGIPSY	20007
MNASCDC4	43504	PWA JT12	52042	RROYCEGIPSY	20008
ONAN 848	99999	PWA JT15	52052	RROYCERR211	*RB21
CTHER *AVON		PWA JT15	52060	RROYCERR211	44554
OTHFR *B4ST		PWA JT15	52112	RROYCERR211	44554
CTHER *R182		PWA JT3C	*JT3C	RROYCESPEY	*SPEY
OTHFR *R335		PWA JT3C	52036	RROYCESPEY	54519
CTHER J0585		PWA JT30	*JT30	RROYCESPEY	54521
CTHFR J1505		PWA JT30	52039	RROYCESPFY	54523
CTHER 03003		PWA JT4	*JT4	RROYCEVIPER	*VIPER
OTHER J3010		PWA JT4	52037	RROYCEVIPER	10201
CTHER J3012		PWA JT8	*JT8	RROYCEVIPER	54550
CTHER 04501		PWA JT8	52044	RROYCEVIPER	44552
OTHER 17013		PWA JT8	52046	TMFCA ARTST3	00003
CTHFR 17030		PWA JT8	52048	TMFCA AST14T	60014
OTHFR 17037		PWA JT8	52049	TMFCA AST2T	50006
CTHER 20003		PWA JT9	*JT9	TMFCA AST3	00007
CTHFR 26002		PWA JT9	52050	TMFCA TURMO4	60008
CTHFR 27005		PWA JT9	52050	WARNER165	64504
CTHER 27011		PWA PT6	*PT6	WAPNER185	54505
CTHFR 27026		PWA PT6	52043	WARNER50	64503
CTHFR 27036		PWA PT6	61501	WRIGHTJ5	67007
CTHER 31701		PWA PT6	61503	WRIGHTR760	57009
CTHER 37002		PWA PT6	61504	WRIGHTR760	67010
OTHFR 41549		PWA PT6	61506	WRIGHTR760	67011
OTHER 41555		PWA PT6	52045	WRIGHTR975	57012
OTHFR 49707		PWA PT6	51532	WRIGHTR975	57015
CTHER 49708		PWA R1340	*R134		
CTHER 51001		PWA R1340	52009		
CTHER 52001		PWA R1340	52010		
OTHFR 52047		PWA R1340	52011		
CTHER 54501		PWA R1340	52012		
CTHER 54510		PWA R1400	52016		
OTHER 54517		PWA R1830	*R183		
OTHER 60002		PWA R1830	52017		
OTHER 60004		PWA R1830	52018		
CTHER 60005		PWA R1830	52019		
OTHER 60009		PWA R1830	52020		
CTHFR 60012		PWA R2000	*R200		
CTHFR 60014		PWA R2000	52021		
CTHFR 60020		PWA R2000	52023		
CTHFR 60030		PWA R2800	*R280		
OTHFR 67018		PWA R2800	52024		
CTHFR 67019		PWA R2800	52025		
CTHFR 67021		PWA R2800	52026		
CTHFR 67024		PWA R985	*R985		
CTHFR 67025		PWA R985	52006		
CTHFR 67026		PWA R985	52007		
CTHFR 67027		PWA R985	52008		
CTHFR 67028		RRROYCEDART	*DART		
CTHER 67029		RROYCEDART	54503		
CTHFR 67030		RROYCEDART	54504		
OTHER 67031		RROYCEDART	54505		

REFERENCES

Census of U.S. Civil Aircraft, Calendar Year 1979, U.S. Department of Transportation, Federal Aviation Administration, Washington, DC: U.S. Government Printing Office, 1980.

Code of Federal Regulations, Aeronautics and Space, Title 14, Parts 60 to 199, U.S. General Services Administration, National Archives and Records Service, Washington, DC: U.S. Government Printing Office, 1978.

"FAA Air Traffic Activity, Calendar Year 1980 Report," Federal Aviation Administration, Washington, DC, 1981.

General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, Washington, DC: U.S. Government Printing Office, 1981.

Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, Washington, DC: U.S. Government Printing Office, 1974.

United States Code Annotated, Title 49, Section 1401, St. Paul, Minnesota: West Publishing Co., 1978.

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